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ABSTRACT

Progress toward four stated objectives in a K-12 career education project was determined after examining the field testing results of students, interviews, and data analysis. Satisfactory progress was made toward objective 1: revising, expanding, and refining two computer retrieval career education units. On a developer questionnaire teachers reacted favorably to the unit revision objective. (Field testing was not completed during the project.) Objective 2, evaluated as successful, was to demonstrate a computer-retrieval system to be used as a teacher aid in individualizing and integrating the units. User questionnaire responses indicated generally that teachers favorably reacted to unit materials, methodology, and content. Objective 3, to demonstrate that the units meet students' academic and career development needs, was evaluated using control and experimental groups in a pretest and posttest design. The basic conclusion was that the career education unit was an effective means for increasing achievement in career knowledge at the elementary level. The final objective was to provide inservice training to school personnel and community representatives. Implementation of a course, "Orientation and Implementation of Career Education, K-12," was evaluated as a positive step toward achieving this objective. A questionnaire revealed that the staff considered the course a successful undertaking. (Appendixes include evaluation instruments. (CSS)

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# EVALUATION REPORT

# A PROJECT TO DEMONSTRATE INCREMENTAL IMPROVEMENTS IN A K-12 CAREER EDUCATION PROGRAM THROUGH AN EXEMPLARY MODEL

GRANT NUMBER: 300760300

FUNDED UNDER A GRANT FROM
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NORTHWEST TRI-COUNTY INTERMEDIATE UNIT
252 Waterford Street
Edinboro, Pennsylvania 16412

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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THE EVALUATION REPORT

# A Project to Demonstrate Incremental Improvements in a K-12 Career Education Program Through an Exemplary Model

Grant Number: 300760300

For:

NORTHWEST TRI-COUNTY INTERMEDIATE UNIT

252 WATERFORD STREET

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September 1977

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# INTRODUCTION

## EVALUATION PLAN

### OVERVIEW

The evaluation plan is basically one of measuring the effectiveness of the K-12 Career Education Curriculum Model. The main thrust of the evaluation will address itself to measuring the program's progression toward the stated objectives of the project. Inasmuch as learning activities and methodology are crucial teacher and pupil components in the project, an evaluation using standardized tests and expert opinion will be undertaken. This aspect of the evaluation will deal primarily with the specific question of the effectiveness of the career education program on career knowledge, reading skills, and mathematics skills.

Career awareness, career exploration, and career preparation of pupils at the preschool, primary, intermediate, junior high school and senior high school levels will be evaluated. Standardized tests, relating to academic achievement in reading, mathematics, and career knowledge, as well as evaluator designed tests will be administered to assess progress toward project objectives.

Comparability of pupils in the project with pupils not participating in the project will be undertaken. A comparable control group will be identified at each grade level. To insure that the groups are equated when the project is initiated, pretesting will be conducted in September in the areas of career knowledge, reading, and mathematics achievement. Similar testing will occur in May of 1977 as a posttest to measure gains made during the year. Thus evidence toward stated objectives will be ascertained.

As a sample of the 17 school districts in Intermediate Unit #5, two districts were chosen, (Ft. LeBoeuf and Millcreek Township) to participate in the testing phase of the project. These districts are considered to be representative of all districts in Intermediate Unit #5.

FOCUS

The evaluation concerns itself with the following:

Progress toward the stated objectives of the project; particularly, the basic purpose of the project which is to demonstrate a Career Education Curriculum Model at a regional level, (The 17 school districts in the Northwest Tri-County Intermediate Unit Region).

Specifically:

1. Revise one elementary and one secondary resource unit designed to integrate career concepts and academic achievement.

2. Demonstrate the utilization of a classroom management (computer-retrieval) system as a tool to aid the teacher in individualizing and integrating career oriented curriculum resource units.

3. Demonstrate on an incremental basis, the utilization of K-12 career oriented curriculum resource units to meet the academic (reading and mathematics) and career development needs of participating students in the Tri-County region.

4. Provide inservice training to participating school district personnel and community representatives from the Northwest Tri-County Intermediate Unit Region to encompass: (Process)

A. Career Education Philosophy and Concepts

B. Career Education Methodology of Collaboration within the Educational System

C. Implementation Procedures of Curriculum Resource Materials

D. Community Relations and Resources

E. Utilization of Inservice Resources

5. Objective 5 - Initiate a career education council to increase the level of interaction between participating local schools and the work community.

PROGRESS TOWARD STATED OBJECTIVES

Design

A systems approach will be used to measure progress toward the five objectives of the project. Questionnaires and opinionaires will be administered to teachers, counselors, pupils and those involved in the community resource committees and workshops. Additional evaluation instruments will include standardized achievement and career tests, picture tests, interviews, and observations. Item and statistical analyses will be made of the tests employed in the study as related to the project objectives.

Objective 1

Revise one elementary and one secondary resource unit designed to integrate career concepts and academic achievement.

Population

1. All teachers revising project units
2. All students exposed to revised units
3. All guidance counselors revising project units
4. All teachers using revised units

Procedures

1. Developer Questionnaire
2. Observations
3. Interviews

Emphasis will be placed on determining the appropriateness and improvements in the revised units.

Objective 2

Demonstrate the utilization of a classroom management (computer-retrieval) system as a tool to aid the teacher in individualizing and integrating career oriented curriculum resource units.

Population

1. All teachers
2. All students
3. All guidance counselors
4. Participating project consultants

Procedures

1. User Questionnaire
2. Opinionaire
3. Teacher logs

Questionnaires, opinionaires, and teacher logs will be used to obtain information concerning the experimental methodology. Emphasis will be placed on ascertaining whether the experimental methodology and activities are considered more effective with children than more traditional methods.

Objective 3

Demonstrate on an incremental basis, the utilization of K-12 career oriented curriculum resource units to meet the academic (reading and mathematics) and career developmental needs of participating students in the Tri-County region.

Population

1. All students

Procedures

1. Standardized achievement tests
2. Career knowledge tests
3. Control group, pretest-posttest design

A basic Control-Group, Pretest-Posttest Design, will be used in this study. The pretest will be utilized to determine if the experimental and the control groups are equal in the areas of career knowledge, reading skills, and mathematics skills at the inception of the evaluation. The posttest results will form the basis upon which judgments will be made as to the effectiveness of the experimental program. Schools will be selected from the Ft. Le Boeuf and Millcreek Township School Districts which are considered representative of the seventeen school districts in the Intermediate Unit #5 and the surrounding geographic area. The grade levels selected will be representative of the pre-school, primary, intermediate, junior high school and senior high school levels.

Experimental Group

| | | |
|---|---|---|
| Kindergarten | Asbury Elementary School | Millcreek Township |
| First grade | Asbury Elementary School | Millcreek Township |
| Second grade | Asbury Elementary School | Millcreek Township |
| Third grade | Asbury Elementary School | Millcreek Township |
| Fourth grade | Asbury Elementary School | Millcreek Township |
| Fifth grade | Asbury Elementary School | Millcreek Township |
| Seventh grade | Ft. Le Boeuf Middle School | Waterford Township |
| Tenth grade | Ft. Le Boeuf Middle School | Waterford Township |

Control Group

Students in classes corresponding to those in the experimental group will be selected as a control group. These classes will be from school districts similar to those from which the experimental group was identified. Students in control classes will not have access to instruction involving any aspect of the experimental procedures of this project.

The specific rooms and teachers selected to participate in the testing phase of the project will be done on a random basis. Within the rooms selected the scores of 120 students in the experimental group and 120 students in the control group will be identified for the statistical analysis. These students will be grouped by grade level as follows:

| | Experimental | Control |
|---|---|---|
| Kindergarten | 15 | 15 |
| First grade | 15 | 15 |
| Second grade | 15 | 15 |
| Third grade | 15 | 15 |
| Fourth grade | 15 | 15 |
| Fifth grade | 15 | 15 |
| Seventh grade | 15 | 15 |
| Tenth grade | 15 | 15 |
| Total | 120 | 120 |

The testing program levels will be as follows:

Kindergarten

| Prestest | Posttest |
|---|---|
| Stanford Early Achievement Test (Reading and Mathematics) Level I | Stanford Early Achievement Test (Reading and Mathematics) Level I<br>Individualized Career Test (K) |

First grade

| Pretest | Posttest |
|---|---|
| Stanford Early Achievement Test (Reading and Mathematics) Level II | Stanford Early Achievement Test (Reading and Mathematics) Level II<br>Individualized Career Test (1 & 2) |

Second grade

| Pretest | Posttest |
|---|---|
| Stanford Achievement Test (Reading and Mathematics) Primary Level I, Form A | Stanford Achievement Test (Reading and Mathematics) Primary Level I, Form A<br>Individualized Career Test (1 & 2) |

Third grade

| Pretest | Posttest |
|---|---|
| Stanford Achievement Test (Reading and Mathematics) Primary Level II, Form A | Stanford Achievement Test (Reading and Mathematics) Primary Level II, Form A<br>Individualized Career Test (1 & 2) |

Fourth grade

| Pretest | Posttest |
|---|---|
| Stanford Achievement Test (Reading and Mathematics) Primary Level III, Form A | Stanford Achievement Test (Reading and Mathematics) Primary Level III, Form A<br>Individualized Career Test (3 & 4) |

Fifth grade

| Pretest | Posttest |
|---|---|
| Stanford Achievement Test (Reading and Mathematics) Intermediate Level I, Form A<br>Career Awareness Inventory | Stanford Achievement Test (Reading and Mathematics) Intermediate Level I, Form A<br>Career Awareness Inventory |

Seventh grade

| Pretest | Posttest |
|---|---|
| Stanford Achievement Test (Reading and Mathematics) Advanced Level, Form A<br>Career Maturity Inventory | Stanford Achievement Test (Reading and Mathematics) Advanced Level, Form A<br>Career Maturity Inventory |

Tenth grade

| Pretest | Posttest |
|---|---|
| Stanford Test of Academic Skills (English and Mathematics) Level I, Form A | Stanford Test of Academic Skills (English and Mathematics) Level I, Form A |
| Career Maturity Inventory | Career Maturity Inventory |

Exact statistical procedures that will be used to analyze the results of the study will not be determined until the pretesting has been completed and scored. This approach is being followed to allow for flexibility that would be needed if the pretest results reveal that the students of the two groups are not initially equated in career knowledge, reading achievement and/or mathematics achievement. Final statistical analysis will be conducted in an acceptable format consistent with the Control-Group, Pretest-Posttest Design incorporated in the study.

An attempt to assess the long range influence of the experimental procedures will be made by comparing the results of students exposed to the project over a two-year period (grades 1, 3, 5); to those exposed for just one year (grades K, 2, 4); to those with no exposure (control group).

Objective 4

Provide inservice training to participating school district personnel and community representatives from the Northwest Tri-County Intermediate Unit Region to encompass:

Population

1. All participating teachers
2. All participating guidance counselors
3. All participating administrators
4. All visiting teachers

Procedures

1. Inservice Questionnaire
2. Observation
3. Logs

The evaluators will gather information concerning the quality and effectiveness of the inservice workshops. Attention will be focused on the content and format of the workshops.

Objective 5

Initiate a career education council to increase the level of interaction between participating local schools and the work community.

This objective was deleted from the project by agreement of the project director and the project officer.

TREATMENT OF DATA

The results will be used to ascertain the following:

1. Progress in relation to the objectives of the project.
2. Comparison of experimental and control group results as to their awareness to the concept questions.
3. An assessment of the project's influence on a longitudinal basis.
4. The development of career awareness, career exploration, and career development through the program.
5. An assessment of the effectiveness and the value of a community resources workshop on career education in the schools of Intermediate Unit # 5 area.

ADDENDUM TO EVALUATION PLAN

Mid-Year Evaluation Report

A Mid-year Evaluation Report was submitted in January, 1977 by the project directors. A copy of this report in it's entirity can be found in Appendix A.

Mid-Year Evaluation Report - Supplement

A supplement to the Mid-Year Evaluation Report explaining and illustrating classroom practices was submitted in April, 1977 by the project evaluators. A copy of this report in it's entirity can be found in Appendix B.

## EVALUATION PROCEDURES

### Objective 1

Revise one elementary and one secondary resource unit designed to integrate career concepts and academic skills.

The major thrust in Objective 1 was to revise, expand, and refine two computer retrieval career education units. These units were "Transportation" for kindergarten through grade 6 and "Government" for senior high school. Concept questions were emphasized during the revision process at the respective grade levels.

Teachers from representative elementary and secondary schools of Intermediate Unit #5 served as developers in Butterfield Hall, Edinboro State College during the summer of 1976. The developers were supervised by project managers. In the opinion of the evaluators the make-up of the teacher developers was sufficiently diverse to provide an adequate cross-section of opinion and expertise to produce excellent learning materials.

Observations, interviews and on-site visits were made by the evaluators during the developmental stages of the revision process. In the judgment of the evaluators the newly revised units are better organized, updated, and represent excellent career education learning materials.

## K-12 Career Education Developer Questionnaire

An analysis of the responses to the Developer Questionnaire indicated that teachers reacted favorably to all questions concerning the project, with one exception. Questions one through twelve solicited responses on a five-point scale from "Strong Agreement" to "Strong Disagreement." The responses were primarily in the categories of "Strong Agreement" and "Mild Agreement." The one exception was question five which was concerned with field testing and evaluation of the units. The majority of the responses to question five was in the "Neutral" or "Mild Disagreement" categories. These responses were anticipated because the units were developed during the summer when children were not available. Teachers indicated that they would like to field test the units.

There were some differences between elementary and secondary teacher responses to the questions on the questionnaire; however, this was normal inasmuch as the revised units represented widely different grade levels of instruction. A statistical summary of the results of this questionnaire can be found in Table 1.

Written comments of the developers were generally favorable in nature. Many comments indicated that through their experiences in developing the units, teachers have utilized the methodology of the project and are more aware of the individual needs of pupils.

Multiple responses from teachers to the questionnaire indicated that they were aware of the following: the importance of career education and the importance of working with students who are not college bound, the desirability of a more individualized approach

to teaching, an innovative approach in helping to solve instructional problems and curriculum construction. These responses, along with many others, show that progress is being made toward Objective 1 of the project. All responses made by the developers to the developer questionnaire can be found in Appendix C.

TABLE 1

Summary - K-12 Career Education Developer Questionnaire

SA - denotes strong agreement with the statement

A - denotes mild agreement with the statement

N - denotes neutral

D - denotes mild disagreement with the statement

SD - denotes strong disagreement with the statement

S - Secondary

E - Elementary

| | SA | A | N | D | SD |
|---|---|---|---|---|---|
| 1. I was given sufficient information about the project (i.e., topic and format) prior to beginning my work on the units. | 1S<br>4E<br>5 | 4S<br>6E<br>10 | | 1S<br>1 | |
| 2. I was given ample opportunity to define the scope and focus of the Career Education Unit which I helped to develop. | 2S<br>4E<br>6 | 3S<br>4E<br>7 | 2E<br>2 | | 1S<br>1 |
| 3. There was an atmosphere of mutual respect and cooperation between myself, the project staff, and consultants. | 3S<br>8E<br>11 | 3S<br>2E<br>5 | | | |
| 4. There were available most of the human and material resources I felt necessary for developing the unit. | 4S<br>5E<br>9 | 2S<br>3E<br>5 | 1E<br>1 | 1E<br>1 | |
| 5. There was an opportunity to test ideas regarding the unit in real situations or obtain factual information concerning their worth or effectiveness. | 1S<br>1E<br>2 | 2S<br>1E<br>3 | 1S<br>2E<br>3 | 1S<br>4E<br>5 | 1S<br>2E<br>3 |
| 6. Progress was continually assessed by all active participants throughout the program. | 2S<br>1E<br>3 | 3S<br>5E<br>8 | 3E<br>3 | 1S<br>1E<br>2 | |
| 7. There was adequate coordination among the various groups working on different units. | 1S<br>4E<br>5 | 2S<br>4E<br>6 | 1E<br>1 | 2S<br>2 | 1S<br>1E<br>2 |
| 8. There was adequate coordination among those working on a single unit within the developmental phase of the project. | 3S<br>6E<br>9 | 1S<br>4E<br>5 | 2S<br>2 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 9. | I felt my activities were significant and meaningful to the project. | 4S<br>9E<br>13 | 2S<br>1E<br>3 | ___ | ___ | ___ |
| 10. | The philosophy and concepts of career education were taken into consideration in the development of the resource unit. | 5S<br>9E<br>14 | 1S<br>1E<br>2 | ___ | ___ | ___ |
| 11. | The make-up of our group was sufficiently diverse to provide an adequate cross-section of opinion and expertise. | 4S<br>6E<br>10 | 2S<br>2E<br>4 | 2E<br>2 | ___ | ___ |
| 12. | The unit was broad and extensive enough to meet the needs and interests of individual students. | 5S<br>8E<br>13 | 1S<br>2E<br>3 | ___ | ___ | ___ |

| | | Yes | No |
|---|---|---|---|
| 13. | As a result of your experiences in this project do you possess different ideas, persuasions, and viewpoints about career education? If so, please list some examples. | 3S<br>9E<br>12 | 3S<br>1E<br>4 |
| 14. | As a result of your experiences in this project are you more aware of problems and potentials of career education as this relates specifically to your own school and classroom? If so, what kind of problems? | 6S<br>9E<br>15 | 1E<br>1 |
| 15. | As a result of this experience, do you anticipate your classroom methodology will be altered? If so, please describe. | 4S<br>8E<br>14 | 2S<br>2 |
| 16. | As a result of this experience, are you more willing to work with others to solve other instructional problems? If so, what type of instructional problems? | 5S<br>8E<br>13 | 1E<br>1 |
| 17. | In your opinion, in building the resource unit, was concern given for individual pupil differences and growth? To what degree? | 6S<br>10E<br>16 | ___ |

Objective 2

Demonstrate the utilization of a classroom management (computer-retrieval) system as a tool to aid the teacher in individualizing and integrating career oriented curriculum resource units.

It is the opinion of the evaluators that the computerized career units were effective in integrating career education into the school curriculum within Intermediate Unit #5 area. This opinion was formulated as a result of observations and interactions with experimental teachers and examinations of logs maintained by the teachers involved in the project.

Suggestions within the units concerning field trips were heavily utilized by the experimental teachers. Teacher logs indicated that a wide variety of field trips were taken at both the elementary and secondary levels. These trips related career concepts to various aspects of the school curriculum.

Resource speakers were also heavily employed. Speakers and consultants from businesses, including florists, police personnel, medical doctors are examples of individuals representing many occupational fields that interacted with children involved in career education.

In addition many other projects were initiated as a result of the career units. Examples of these included the construction of a room bookmobile as a reading center, the acquisition of a greenhouse installed in a classroom, and numerous bulletin boards.

The evaluators feel strongly that the computerized career units were an effective aid in helping teachers to better implement the career education concepts into the regular school curriculum. In addition it appears that the units also are a valuable aid in helping teachers to individualize their instruction to better meet the needs of students.

## K-12 Career Education User Questionnaire

The responses to the User Questionnaire indicated that in general teachers reacted favorably to the materials, methodology, and contents of the units used in career education. Questions one through eleven were "Yes-No" in nature. The consensus of opinion on questions one, two, five, six, seven, eight, ten and eleven was favorable.

In question three responses were equally divided between "Yes" and "No". The majority of elementary teachers felt that laboratory experiences, class demonstrations and inservice training would not be of value in implementing the units; whereas, secondary teachers felt that these experiences provide valuable information in the implementation of the career education units. Question four asked respondents if their ideas, persuasions and viewpoints about career education changed after using the guides. A small majority of the teachers responded positively to this question.

Questions twelve through fifteen were open-ended in nature. An analysis of the responses to these questions revealed that teachers who used the units were interested in career education for their students and improving the quality of education in their classrooms.

A statistical summary of the results of this questionnaire can be found in Table 2.

All responses made by users to the questionnaire can be found in Appendix D.

TABLE 2

Summary - K-12 Career Education User Questionnaire

| No. | Question | | Yes | No | No Response |
|---|---|---|---|---|---|
| 1. | In your opinion, was this unit oriented toward career awareness, exploration or preparation for your students. | Elementary | 11 | | |
| | | Secondary | 14 | 2 | 2 |
| | | Total | 25 | 2 | 2 |
| 2. | Were you given sufficient information and guidance prior to using and during the use of the units? If no, please explain. | Elementary | 10 | 1 | |
| | | Secondary | 17 | 1 | 1 |
| | | Total | 27 | 2 | 1 |
| 3. | Would you consider a laboratory, demonstration class, or other inservice training of value in helping you to learn how to implement units? Please explain. | Elementary | 4 | 7 | |
| | | Secondary | 11 | 8 | |
| | | Total | 15 | 15 | |
| 4. | Do you possess different ideas, persuasions, and viewpoints about career education and its processes since your experiment with the guide and unit? Please explain. | Elementary | 8 | 3 | |
| | | Secondary | 9 | 9 | 2 |
| | | Total | 17 | 12 | 2 |
| 5. | Are you more aware of problems in education and career education specifically in your own school and classroom as a result of using the guide? If yes, please explain. | Elementary | 8 | 2 | 1 |
| | | Secondary | 11 | 6 | 2 |
| | | Total | 19 | 8 | 3 |
| 6. | Did you select and request individual student print-outs? If so, how many? If not, why? | Elementary | 10 | 1 | |
| | | Secondary | 12 | 5 | 2 |
| | | Total | 22 | 6 | 2 |
| 7. | In your print-out for individual students, were the number of suggestions relating to content, activities, materials, and measuring devices sufficient? If no, please explain. | Elementary | 11 | | |
| | | Secondary | 13 | 3 | 3 |
| | | Total | 24 | 3 | 3 |
| 8. | Did you experience difficulty in obtaining the materials listed in the unit? If yes, please explain. | Elementary | 1 | 10 | |
| | | Secondary | 4 | 14 | 1 |
| | | Total | 5 | 24 | 1 |

| | | | | |
|---|---|---|---|---|
| 9. If you did not use individual student print-outs, did you find the pre-planning guide helpful? If so, in what way? | Elementary | 8 | | 3 |
| | Secondary | 8 | | 11 |
| | Total | 16 | | 14 |
| 10. Are you planning to use this career unit again? | Elementary | 8 | 1 | |
| | Secondary | 12 | 5 | 2 |
| | Total | 20 | 6 | 2 |
| 11. Would you like to use other career units designed within this format? | Elementary | 7 | 2 | |
| | Secondary | 15 | 3 | 1 |
| | Total | 22 | 5 | 1 |

Questions 12 through 15 were open-ended questions. All comments to these questions can be found in Appendix D. These questions were:

12. In your opinion, what are the strong points of these units as they relate to career education?

13. In your opinion, what aspects of this career unit should be altered or improved?

14. How do you feel the children reacted to the materials and methodology of this unit? Describe briefly.

15. How might you incorporate career education concepts into your classroom in the future in addition to the computer unit approach?

Objective 3

Demonstrate on an incremental basis, the utilization of K-12 career oriented curriculum resource units to meet the academic (reading and mathematics) and career developmental needs of participating students in the Tri-County region.

Field Testing Procedures

The evaluation of objective three was primarily completed by employing a control group, pretest-posttest design. The experimental and control classes were randomly selected from previously identified schools within two school districts. Millcreek Township School District is primarily composed of middle class white families in a semi-urban setting while the Fort LeBoeuf School District is generally classified as a rural area typical of northwestern Pennsylvania. Table 3 below identifies the specific grade levels within the schools utilized in the testing portion of the project. It also includes the tests given at each level.

TABLE 3

Project Locations and Tests Administered

| Grade Level | Experimental | Control | Instrument | Career Education Tests |
|---|---|---|---|---|
| K | Asbury Elementary School Millcreek Twp. | Ridgefield Elementary School Millcreek Twp. | Stanford Early Achievement Test Level I, Form A | Individualized Career Test (K)* |
| 1 | Asbury Elementary School Millcreek Twp. | Ridgefield Elementary School Millcreek Twp. | Stanford Early Achievement Test Level II, Form A | Individualized Career Test (1-2)* |
| 2 | Asbury Elementary School Millcreek Twp. | Ridgefield Elementary School Millcreek Twp. | Stanford Achievement Test Primary Level I, Form A | Individualized Career Test (1-2)* |
| 3 | Asbury Elementary School Millcreek Twp. | Ridgefield Elementary School Millcreek Twp. | Stanford Achievement Test Primary Level II, Form A | Individualized Career Test (3-4)* |

| | | | | |
|---|---|---|---|---|
| 4 | Asbury Elementary School Millcreek Twp. | Ridgefield Elementary School Millcreek Twp. | Stanford Achievement Test Primary Level III, Form A (3-4)* | Individualized Career Test |

* Not administered as a pretest

| | | | | |
|---|---|---|---|---|
| 5 | Asbury Elementary School Millcreek Twp. | Ridgefield Elementary School Millcreek Twp. | Stanford Achievement Test Intermediate Level, Form A | Career Awareness Inventory |
| 7 | Ft. LeBoeuf Middle School Waterford, Pa. | Wattsburg Middle School Wattsburg, Pa. | Stanford Achievement Test Advanced Level, Form A | Career Maturity Inventory |
| 10 | Ft. LeBoeuf High School Waterford, Pa. | Seneca High School Wattsburg, Pa. | Stanford Test of Academic Skills Level I, Form A | Career Maturity Inventory |

The experimental classrooms included the use of the career education units identified in the grant as part of the classroom instructional program.

PROCEDURES

All pretesting in the project was completed during September, 1976. Posttesting was completed during the time period of May 31 and June 17, 1977. Appropriate levels of the Stanford Achievement Test were administered to assess the impact of the career units on the subject areas of reading and mathematics. An Individualized Career Test was given to children in grades kindergarten through four. Fifth grade was given the Career Awareness Inventory while the seventh and tenth grade students were administered the Career Maturity Inventory. A summary of all tests used in the testing phase of the evaluation can be found in Appendixes E, F, G and H.

The statistical procedures used to evaluate the posttesting results were dependent upon pretesting differences identified between the control and experimental classes.

PRETESTING

Table 4 presents a summary of the t-test results comparing mean scores of the control and experimental classes for the pretesting phase of the project.

TABLE 4

t-Test Values Comparing Pretest Scores in Reading, Mathematics and Career Knowledge between Experimental and Control Groups

| Grade level | Reading | Mathematics | Career Knowledge |
|---|---|---|---|
| K | 1.7258 | 1.7034 | |
| 1 | .2490 | 1.2384 | |
| 2 | 1.2651 | 3.3601 * | |
| 3 | .7594 | .3543 | |
| 4 | 2.2026 * | 2.003 | |
| 5 | 3.8674 * | 3.4823 * | 3.36709 * |
| 7 | .9341 | .7673 | .2096 |
| 10 | 4.4729 * | 4.2717 * | 4.8315 * |

Degree of Freedom = 28
*Significant: .05 level of confidence

The data in Table 4 contains the t-test values of the experimental and control groups in this project. An inspection of these data show that the two groups did not differ significantly in the pretesting stage except in the following:

1. Second grade--mathematics--control group higher
2. Fourth grade--reading------experimental group higher
3. Fifth grade---all areas----experimental group higher
4. Tenth grade---all areas----experimental group higher

All significant differences are marked with an asterisk (*).

The mean scores of all grade levels for the pretest scores are found in Appendix I. All scores presented in the study are presented in raw score units.

POSTTESTING

The analysis of the posttest results was completed by using two techniques. In those grade levels and subject areas where no significant

differences occured in the pretest scores, a t-test was used to compare the posttest results of the two groups. Where significant pretest scores were present, an analysis of covariance technique was employed. This approach was used to compensate for differences between the groups that existed prior to the beginning of the studies. Where such differences were identified, adjustments in the posttest scores were computed by utilizing the respective pretest scores.

Table 5 presents the statistical comparison of the control and experimental groups concerning reading achievement.

TABLE 5

Posttest Reading Results

| Grade level | | Experimental | Control | Degrees of Freedom | t-Value | F-Value |
|---|---|---|---|---|---|---|
| K | Mean | 25.6 | 26.73 | 28 | .9776 | |
| | Variance | 15.97 | 4.07 | | | |
| | No. of Children | 15 | 15 | | | |
| 1 | Mean | 90.53 | 89 | 28 | .4852 | |
| | Variance | 98.84 | 52.29 | | | |
| | No. of Children | 15 | 15 | | | |
| 2 | Mean | 80.27 | 84.6 | 28 | 1.4562 | |
| | Variance | 109.50 | 23.12 | | | |
| | No. of Children | 15 | 15 | | | |
| 3 | Mean | 151.33 | 149.3 | 28 | .8965 | |
| | Variance | 33.10 | 43.81 | | | |
| | No. of Children | 15 | 15 | | | |
| 4 | Mean | 114.73 | 109.27 | 1;27 | | .0559 |
| | Adj. Mean | 112.29 | 111.71 | | | |
| | Variance | 43.92 | 105.92 | | | |
| | No. of Children | 15 | 15 | | | |

| Grade level | | Experimental | Control | Degrees of Freedom | t-Value | F-Value |
|---|---|---|---|---|---|---|
| 5 | Mean | 113.53 | 90.73 | 1;27 | | 5.1918 * |
| | Adj. Mean | 108.25 | 96.08 | | | |
| | Variance | 67.27 | 268.21 | | | |
| | No. of Children | 15 | 15 | | | |
| 7 | Mean | 81.4 | 76.73 | 28 | .7885 | |
| | Variance | 193.83 | 332.35 | | | |
| | No. of Children | 15 | 15 | | | |
| 10 | Mean | 73.13 | 59.33 | | | |
| | Adj. Mean | 67.78 | 63.16 | | | |
| | Variance | 6.27 | 142.38 | 1;27 | | 2.1483 |
| | No. of Children | 15 | 15 | | | |

* Significant: .05 level of confidence

An examination of the results in Table 5 indicate that no significant differences exist between the control and experimental groups except at the fifth grade level. It is concluded that career education units do not statistically increase students' achievement in reading.

Table 6 presents the comparison statistics for mathematics.

TABLE 6

Posttest Mathematics Results

| Grade level | | Experimental | Control | Degree of Freedom | t-Value | F-Value |
|---|---|---|---|---|---|---|
| K | Mean | 21.4 | 25.13 | 28 | 2.9003* | |
| | Variance | 13.69 | 11.12 | | | |
| | No. of Children | 15 | 15 | | | |
| 1 | Mean | 52.53 | 50.8 | 28 | 1.5142 | |
| | Variance | 7.69 | 11.89 | | | |
| | No. of Children | 15 | 15 | | | |
| 2 | Mean | 50.87 | 58.27 | 1;27 | | 1.8593 |
| | Adj. Mean | 53.15 | 55.98 | | | |
| | Variance | 50.41 | 21.64 | | | |
| | No. of Children | 15 | 15 | | | |
| 4 | Mean | 86.27 | 78.53 | 28 | 2.3253* | |
| | Variance | 27.92 | 138.27 | | | |
| | No. of Children | 15 | 15 | | | |
| 5 | Mean | 99.53 | 71.00 | 1;27 | | 9.8816* |
| | Adj. Mean | 94.35 | 76.18 | | | |
| | Variance | 30.41 | 345.57 | | | |
| | No. of Children | 15 | 15 | | | |
| 7 | Mean | 76.50 | 68.87 | 28 | 1.2761 | |
| | Variance | 170.24 | 338.27 | | | |
| | No. of Children | 15 | 15 | | | |
| 10 | Mean | 46.27 | 35.27 | 1;27 | | 2.2869 |
| | Adj. Mean | 41.47 | 39.20 | | | |
| | Variance | 2.35 | 57.78 | | | |
| | No. of Children | 15 | 15 | | | |

* Significant: .05 level of confidence

The comparison in the subject area, mathematics, identifies three grade levels where significant differences exist: kindergarten, fourth and

fifth grade. The kindergarten scores indicate that the control group's achievements were better than the experimental students. In the fourth and fifth grade the experimental students exceeded the control students in mathematical achievement. No other grade level comparisons were significant. The conclusion drawn was that career education units did not prove to be a significant factor in improving students' achievement scores in mathematics during a single year of instruction. It must be noted that no mathematics comparisons for the third grade are included in Table 6. This situation resulted because of a death in the family of the experimental third grade teacher.

Table 7 contains the results of the comparison between the control and experimental students in the area of career knowledge.

TABLE 7

Posttest Career Knowledge Results

| Grade level | | Experimental | Control | Degree of Freedom | t-Value | F-Value |
|---|---|---|---|---|---|---|
| K | Mean | 16.6 | 13.93 | 28 | 3.2554* | |
| | Variance | 5.17 | 4.92 | | | |
| | No. of Children | 15 | 15 | | | |
| 1 | Mean | 16.53 | 11.13 | 28 | 5.2816* | |
| | Variance | 2.84 | 12.84 | | | |
| | No. of Children | 15 | 15 | | | |
| 2 | Mean | 17.53 | 13 | 28 | 5.1009* | |
| | Variance | 3.12 | 8.71 | | | |
| | No. of Children | 15 | 15 | | | |
| 3 | Mean | 19.4 | 15.73 | 28 | 4.8441* | |
| | Variance | 4.26 | 4.35 | | | |
| | No. of Children | 15 | 15 | | | |
| 4 | Mean | 20.73 | 17.53 | 28 | 2.9293* | |
| | Variance | 7.35 | 10.55 | | | |
| | No. of Children | 15 | 15 | | | |

| Grade level | | Experimental | Control | Degree of Freedom | t-Value | F-Value |
|---|---|---|---|---|---|---|
| 5 | Mean | 91.2 | 77.73 | 1;27 | | 3.7643 |
| | Adj. Mean | 87.72 | 81.21 | | | |
| | Variance | 49.03 | 111.07 | | | |
| | No. of Children | 15 | 15 | | | |
| 7 | Mean | 96.47 | 90.13 | 28 | 1.7644 | |
| | Variance | 89.55 | 104.13 | | | |
| | No. of Children | 15 | 15 | | | |
| 10 | Mean | 123.93 | 94 | | | .1829 |
| | Adj. Mean | 105.66 | 102.47 | | | |
| | Variance | 15.92 | 333.43 | 1;27 | | |
| | No. of Children | 15 | 15 | | | |

* Significant: .05 level of confidence

An examination of the results indicate that significant differences in grades kindergarten through grade four occur in favor of the experimental group. Grades five, seven, and ten did not show significant differences even though the experimental scores were somewhat higher than the control groups scores.

The basic conclusion discerned from these results indicates that career education units have been an effective means for increasing achievement in career knowledge at the elementary level. The concepts included in measuring career knowledge were:

a. What is work?

b. Who do people work with?

c. What products are produced?

d. Who works in the occupations?

e. How do these occupations help people?

f. What is the life style of the people in the occupations?

g. What are the occupations?

An additional question concerning the effect of two years of exposure to the career units as compared to one year of exposure was studied by the evaluators. It was not feasible to make statistical comparisons concerning this issue because of the incongruity of data obtained from the experimental groups and the control groups at the various levels. However, in the opinion of the evaluators those students at the first, third and fifth grade levels who were in their second year of the project appeared to make greater gains when compared to their respective control groups than did the students in kindergarten, grade two and grade four with one year of exposure to the program. This statement applies to reading, mathematics, and career knowledge achievement.

The evaluators through observation and discussion with students are of the opinion that the experimental students, in addition to achievement gains, exhibit a more positive attitude toward learning, school, the world of work, and are more highly motivated as compared to the control group.

Another observation that should be noted is that in the experimental groups at grade five and ten, a change of teachers took place at midyear. Though the incoming teachers did an excellent job using the career units, the break in continuity may not have had a beneficial effect on the testing results at these grade levels.

In general the evaluators feel strongly that the career education units offer a refreshing stimulus to classroom instruction and results in increased student involvement in the learning process. This results in more positive attitudes among students which in turn leads to more effective learning. The evaluators consider the career units to be a beneficial addition to a school's curricular offerings.

OBJECTIVE 4

Provide inservice training to participating school district personnel and community representatives from the Northwest Tri-County Intermediate Unit region to encompass:

1. Career Education, Philosophy and Concepts
2. Career Education Methodology of Collaboration within the Educational System
3. Implementation Procedures of Curriculum Resource Materials
4. Community Relations and Resources
5. Utilization of Inservice Resources

Part I. Inservice Workshops.

The diffusion of information concerning career education in the K-12 Career Education Project to teachers, administrators, and counselors within the Intermediate Unit #5 was a major thrust of the proposal. Consultants in the project chose inservice education as the major thrust for conveying the basic information concerning the project.

The main objective of the inservice programs was to acquaint teachers, administrators, and counselors with the goals and operational procedures of the K-12 Career Education Project. Project staff members utilized the expertise of classroom teachers who had previously used career education units in their classrooms when planning these inservice programs. These programs were concerned with career education implementation in the classrooms within the Intermediate Unit #5. An overview of career education was presented to teachers, administrators, and counselors representing all basic educational levels. After this general orientation to career education, specific aspects of the project were presented.

The teachers, administrators, and counselors were generally receptive to the orientation. Each participant in the workshop was asked to complete a

questionnaire designed by the evaluators. A summary of the results of 40 questionnaires can be found on Table 8 called "Summary Statistics for In-service Workshops." A copy of this questionnaire can be found in Appendix J.

TABLE 8

Staff Evaluation of Career Education Inservice Meetings

Project Year 1976

Please circle either a Yes or No response to each of the following questions:

| | | Yes | No | NR |
|---|---|---|---|---|
| 1. Did the discussions on career education meet your expectations? | Teachers | 11 | 4 | |
| | Administrators | 7 | 4 | |
| | Counselors | 7 | 0 | |
| | Special Ed. | 7 | 0 | |
| | | 32 | 8 | |
| 2. Did you realize any professional development through these discussions? | Teachers | 14 | 1 | |
| | Administrators | 8 | 2 | 1 |
| | Counselors | 5 | 2 | |
| | Special Ed. | 7 | 0 | |
| | | 34 | 5 | 1 |
| a. A better understanding of the career education concept? | Teachers | 14 | 1 | |
| | Administrators | 7 | 3 | 1 |
| | Counselors | 6 | 1 | |
| | Special Ed. | 7 | 0 | |
| | | 34 | 5 | 1 |
| b. A better understanding of the actual implementation of career education in the classroom? | Teachers | 11 | 4 | |
| | Administrators | 6 | 4 | 1 |
| | Counselors | 3 | 4 | |
| | Special Ed. | 7 | 0 | |
| | | 27 | 12 | 1 |
| c. A better understanding of career development as a life-long, continuous process? | Teachers | 13 | 2 | |
| | Administrators | 8 | 2 | 1 |
| | Counselors | 4 | 3 | |
| | Special Ed. | 7 | 0 | |
| | | 32 | 7 | 1 |
| 3. Would you like to help with the development of a comprehensive career education plan for your classroom or school system? | Teachers | 11 | 4 | |
| | Administrators | 4 | 6 | 1 |
| | Counselors | 6 | 1 | |
| | Special Ed. | 7 | 0 | |
| | | 28 | 11 | 1 |

| | | | Yes | No | NR |
|---|---|---|---|---|---|
| 4. | Would you like a follow-up career education workshop to deal with more specific development and implementation? | Teachers | 10 | 5 | |
| | | Administrators | 4 | 5 | 2 |
| | | Counselors | 6 | 1 | |
| | | Special Ed. | 7 | 0 | |
| | | | 27 | 11 | 2 |

| | | | Poor | Fair | Average | Good | Excellent | NR |
|---|---|---|---|---|---|---|---|---|
| 5. | What is your overall rating of the meetings on career education? (Please circle one) | Teachers | 1 | 0 | 3 | 10 | 1 | 0 |
| | | Administrators | 0 | 3 | 3 | 4 | 1 | 0 |
| | | Counselors | 0 | 0 | 2 | 4 | 0 | 1 |
| | | Special Ed. | 0 | 0 | | 6 | 1 | 0 |

6. Please state any reactions you have to career education.

An analysis of the responses made by participants revealed that satisfactory progress has been made towards the achievement of this objective. Questions one through four asked respondents to indicate "Yes-No" to seven specific questions concerning orientation to career education, career development and career education plans for classrooms in their respective school systems. The overall ratings indicated a positive feeling toward the inservice workshops. Question six asked respondents to state any reactions they had to career education. A complete list of these reactions can be found in Appendix J.

Inservice workshops were conducted for classroom teachers in small group settings. Below is a partial list of the workshops conducted during the first semester:

| Date | District | Building | No. of Participants |
|---|---|---|---|
| Sept. 15, 1976 | Fort Le Boeuf | Middle School | 6 |
| Sept. 17, 1976 | Millcreek | Asbury Elementary | 5 |
| Sept. 20, 1976 | Millcreek | Asbury Elementary | 6 |
| Sept. 21, 1976 | Fort Le Boeuf | Middle School | 6 |
| Sept. 23, 1976 | Fort Le Boeuf | Middle School | 5 |
| Sept. 27, 1976 | Fort Le Boeuf | High School | 4 |
| Sept. 29, 1976 | Fort Le Boeuf | Middle School | 6 |
| Sept. 30, 1976 | Fort Le Boeuf | Middle School | 6 |
| Oct. 6, 1976 | Fort Le Boeuf | Middle School | 6 |
| Oct. 8, 1976 | Fort Le Boeuf | High School | 4 |
| Oct. 11, 1976 | Union City | High School | 2 |
| Oct. 12, 1976 | Fort Le Boeuf | High School | 2 |
| Oct. 28, 1976 | Union City | High School | 7 |
| Oct. 29, 1976 | Fort Le Boeuf | High School | 2 |
| Nov. 15, 1976 | Girard | Elk Valley Elementary | 2 |
| Nov. 18, 1976 | Conneaut | Conneaut Valley Elementary | 3 |
| Dec. 13, 1976 | Millcreek | Asbury Elementary | 2 |
| Dec. 15, 1976 | Fort Le Boeuf | High School | 3 |

Part II. Career Education Course.

As a result of these inservice workshops the consultants in the Career Education K-12 Project devised a thirty hour course that carried two inservice credits under the auspices of the Northwest Tri-County Intermediate Unit #5. The course was an outgrowth of an interest expressed by teachers in career education.

The career education course was scheduled for the second semester of the school year 1976-77, with eleven teachers participating from various school districts. After the successful completion of this course, all seventeen school districts in the Northwest Tri-County Intermediate Unit were surveyed, one hundred fourteen teachers indicated that they would be interested in inservice course work in career education. Listed below is a copy of the course outline and the dates on which the course was taught:

A. Title of Course: Orientation and Implementation of Career Education, K-12 #5.42

B. Brief Description: The purpose of the course is to provide inservice training to all interested school personnel throughout the Northwest Tri-County Intermediate Unit region (17 school districts). The inservice training will include three phases.

1) Orientation----- The philosophy and concepts of career education as recognized and accepted by the Intermediate Unit Staff and the United States Office of Education.

2) Methodologies-- Techniques to be used for implementation purposes to include curriculum programs and career oriented resources.

3) Implementation- Classroom utilization of techniques as described during the Methodology phase.

The program will involve a minimum of thirty (30) contact hours of instruction. Two (2) inservice credits.

Schedule of sessions are:

March 31, 1977

Three hours of instruction (orientation)

April 14, 1977

Three hours of instruction (orientation)

April 21, 1977

Three hours of instruction (Methodologies -- "Hands-on" experiences)

April 29, 1977

Three hours of follow-up instruction (Implementation --sharing of ideas and problems)

May 19, 1977

Three hours of follow-up instruction (Implementation --sharing of ideas and problems)

Fifteen hours of actual implementation of career education into participant's present school situation

Total -- 30 hours; 2 Inservice Credits

C. Statement of Need: A proposal from the Intermediate Unit for a comprehensive career education program, K-12 has been approved by the United States Office of Education as one of the national demonstration models. To properly implement career education for the participating students, a considerable amount of inservice training for school personnel is essential. The need for this inservice program was determined by career education surveys, questionnaires and the Education Quality Assessment (EQA).

D. List of Competencies to be Developed:

1) Educators will become more aware of career education rationale, purpose and concepts.

2) Educators will become more knowledgeable of the fifteen (15) career clusters expounded upon by the United States Office of Education.

3) Educators will attempt to develop a systematic approach to implementing career education activities.

4) Educators will become more aware of a regional plan for implementation of career education in local school districts.

5) Educators will become more aware of career oriented resources, both human and physical, available from a variety of sources.

6) Educators will utilize and implement career education activities in their individual setting.

E. Teaching Strategies to be Employed; Materials, Etc.:

1) Computer-based career education curriculum units from the Northwest Tri-County Intermediate Unit.

2) Appropriate books and filmstrips from the Career Education Section of the Intermediate Unit Library.

3) Career Education Specialist from the Northwest Tri-County Intermediate Unit.

4) A follow-up evaluation information sharing session.

F. Evaluation of Competency Achieved by the Participants:

The evaluation will focus on progress toward the course objectives. The instructors will rate the group activities. A log will be kept by each participant as well as the course instructors. Finally the Northwest Tri-County Intermediate Unit inservice evaluation questionnaire will be completed by all participants.

G. Who will have Administrative Responsibility for the Course?

Dr. John P. Jarvie, Inservice Co-ordinator
Northwest Tri-County Intermediate Unit

H. Provision for Follow-up:

Follow-up will be on-going and provided by the course instructors to assist participants during implementation and provide information and support.

I. Resource Available for this Course:

Space will be provided by the Northwest Tri-County Intermediate Unit, as well as curriculum resource units and other resource materials, such as books, films, study prints, etc.

J. What are the Plans for Participant's Evaluation of the Course?

The participants will complete the Northwest Tri-County Intermediate Unit Inservice Education Questionnaire upon the completion of each phase of training.

K. For Whom is the Course Designed? What are the Enrollment Limits, if any?

Orientation and Implementation of Career Education, K-12 is designed for all elementary and secondary educators, guidance counselor, administrators and interested community members. Enrollment is limited to the seventeen school districts in the Northwest Tri-County Intermediate Unit.

L. Have you made an agreement with an institution of higher education to grant college credit? If so, name the college or university, give the number of credits, identify the college contact person and attach a copy of the letter or agreement.

Not applicable.

Implementation of the course, "Orientation and Implementation of Career Education K-12" was a positive step toward achievement of Objective four. The questionnaire results that follow support the opinion that the inservice course was considered a successful undertaking.

## STAFF EVALUATION OF CAREER EDUCATION INSERVICE MEETINGS

1. Did the discussions on career education meet your expectations?

   Yes 7 No 2

2. Did you realize any professional development through these discussions?

   Yes 9 No ____

   a. A better understanding of the career education concept?

      Yes 9 No ____

   b. A better understanding of the actual implementation of career education in the classroom?

      Yes 9 No ____

   c. A better understanding of career development as a lifelong continuous process.

      Yes 9 No ____

3. Would you like to help with the development of a comprehensive career education plan for your classroom or school system.

   Yes 4 No 5

4. Would you like a follow-up career education workshop to deal with more specific development and implementation?

   Yes 8 No 1

5. What is your over-all rating of the meetings on career education? Please circle one

   Poor ____ Fair ____ Average 3 Good 6 Excellent ____

6. Please state any reactions you have to career education.

   I feel career education is a very important aspect of education. The course was very beneficial for me as I had never been introduced to career education.

   I did not realize how all encompassing it was, such as seeing it as a life-long continuous process. I also enjoyed hearing about Project 81 and its development. I also liked the background of how career ed was developed.

I was surprised at the versatility. I realize how important it is now since class and especially since using it and discussing it with my students!

I think it will be very easy to implement next year.

It served its purpose as educating me to career education. Also realized how to implement into regular teaching day.

From taking this course, I feel it would be beneficial to give a course like this at the beginning of school so that teachers would be more aware of the many ways they can implement career education properly. I do understand better now the meaning of career education.

I have found I enjoy doing the career education activities after I got into it. It was very easy to co-ordinate career education TV programs into the class. I became more aware of this TV time and haven't taught through it.

More people ought to be aware!
It's definitely necessary.

Concepts of career education good but it son't save the world! Course did give me a better understanding of concepts.

General Comments about the Course

More emphasis on implementation of career education
Follow-up course with activities or methods of implementation.

Would I keep driving from Warren if there wasn't something?
Possibly more assignments on implementation
Handouts may be better just given as reading assignments

This course has been beneficial to me because I knew nothing about career education. I think a second follow-up course would be helpful. I think more time could be spent on actual activities and ways of relating it to classwork. The only thing I didn't find particularly relevant was all the background material, legal aspects, and history.

I enjoyed the course but wish it could have started earlier in the year so we would have had more time to implement the ideas we got from the course.

Good-would have been better if in the fall semester. Need for more discussion within class members. Should try to educate more teachers with an inservice program

I feel I really need a little more work in how to implement it into the program without having to really spend hours looking for activities and resources. I would have liked to see more examples and situations displaying the implementation of career education.

I would like to continue with the career education course. The course would have been much more beneficial if it had been offered earlier in the year and implementation would not have been as much of a problem. A follow-up course would be beneficial.

Would've been more beneficial in fall.
Portion of one class should have been held in Examination Room.
Discussion of articles or less articles to be evaluated didn't really enjoy these or benefit from them.
Small group work during 1st class was enjoyable (helped to get to know other class members).
More of that would have been helpful.
Sharing of ideas was great - should have had more of that.
Wish we could have had print-outs earlier!

Part III. Visitations and Orientations.

Numerous small group workshops and contacts were made during the year to orient teachers to career education and provide exposure to the curriculum source units in the schools of Intermediate Unit #5. Specifically from January 1 through June 30, 1977 the following inservice contacts were made by members of the project staff:

| | |
|---|---|
| Total visits to schools | 140 |
| Total teachers visited | 82 |
| Total number of buildings visited | 31 |
| Total school districts visited | 15 |

Names of School Districts:

| | | |
|---|---|---|
| Conneaut | Fairview | Crawford Central |
| Penncrest | Erie City | Ft. Le Boeuf |
| General Mc Lane | Northwestern | Union City |
| Girard | Corry | Millcreek |
| Wattsburg | Titusville | North East |

Objective 5

Initiate a career education council to increase the level of interaction between participating local schools and the work community.

This objective was deleted from the project by agreement of the project director and the project officer.

## SUMMARY OF EVALUATION

Progress toward the stated objectives in the K-12 Career Education Project was determined after examining the field testing results of students, interviews and data analyses.

Written comments by the developers indicated that teachers felt the scope and focus of the units provided excellent learning opportunities for children.

Satisfactory progress has been made toward objective one. Responses to the developer questionnaire revealed that teachers reacted favorably to the project objective of revising the units. (Field testing of units was not completed during the duration of the project.)

Progress toward objective two was satisfactory. User questionnaire responses indicated to the evaluators that, in general, teachers had a favorable reaction to the materials, methodology, and content of the units in the project. Teacher users felt that more specific help in using guides, implementing specific lessons, and in obtaining instructional resources was necessary.

Objective three was evaluated by a series of achievement and career tests designed to help assess the progress toward the objective. In the area of reading achievement only in the fifth grade class was there a significant difference between the groups observed. At all other levels no difference in reading achievement was noted.

In the area of mathematical achievement, most grade levels did not differ significantly between the control and the experimental group. Exceptions occurred at the kindergarten level, the fourth grade level and the fifth grade

level. In kindergarten the control group attained a higher achievement level while in the fourth and fifth grades the experimental groups exceled.

It should be emphasized that the career units were not specifically designed to teach mathematics or reading. As a result, gains in these areas were not anticipated. Furthermore, for such gains to take place a time structure longer than one year should be considered for such an evaluation.

Career knowledge in grades kindergarten through four showed significant gains in performance for the experimental group. Though the experimental students ranked higher than the control students, in grades five, seven and ten, the differences were not considered significant.

The evaluators were extremely pleased with the progress made toward achieving Objective three. It was also felt that the gains made in the area of career knowledge was the direct result of exposure to the career education units.

Satisfactory progress has been made toward objective four which dealth with diffusion of the K-12 Career Education Project. Inservice workshops were well organized, professionally presented, and contained the fundamental ideas of career education. Teachers, administrators, and counselors were generally receptive to the orientation. Feedback from administrators and teachers was incorporated in ensuing workshops within Intermediate Unit #5. The development of an inservice course for credit was a noteworthy accomplishment.

Objective five in the original proposal was deleted.

Recommendations

The evaluators recommend:

1. Continued up-dating and revision of content and activities of the units should be a major consideration in any future undertakings.

2. Inservice training of teachers should be expanded to promote more effective utilization of the units.

3. There should be a continual diffusion of the project through workshops, follow-up visitations, and inservice courses through the auspices of Intermediate Unit #5.

4. Intermediate Unit #5 staff should compile lists of resource people available to speak to classes concerning the world of work.

5. Greater use of publicity should be used to inform the public in northwestern Pennsylvania concerning career education projects in Intermediate Unit #5 schools.

6. A synposis of each of the current units should be made for dissemination to teachers, administrators and counselors in the region.

7. Instructional packets of materials should be compiled to include filmstrips, pictures, bulletin board ideas, teaching aids, films, multi-media materials, etc. to supplement the computer units.

8. Units should incorporate specific activities designed to improve mathematics and reading achievement.

9. Further orientation of parents and laypersons via visuals should be promoted through public presentations to interested groups.

10. The project should be continued, refined, and expanded.

11. The units on "Government" and "Transportation" need to be further field tested within Intermediate Unit #5.

MID YEAR EVALUATION

OBJECTIVE 1

Revise one elementary and one secondary resource unit designed to integrate career concepts and academic skills.

On July 29, the revision of two units, (transportation at the elementary level and government at the secondary level) was completed. Fourteen elementary teachers and 12 secondary teachers participated in the project. At the conclusion of the project a questionnaire was administered to the participating teachers. A formal analysis of the questionnaire results will be included in the final report.

OBJECTIVE 2

Demonstrate the utilization of a classroom management (Computer-Retrieval) system as a tool to aid the teacher in individualizing and integrating career oriented curriculum resource units.

At this time the government and transportation units are not yet available to teachers. The process of computerizing the units has been initiated and is well on its way toward completion. The revision and updating of other units has been completed and they are available to all teachers. Table 2-1 summarizes the unit usage through December 31, 1976.

TABLE 1

Unit Usage Summary

| Month | Teacher Requests | Student Requests |
|---|---|---|
| September, 1976 | 12 | 8 |
| October, 1976 | 62 | 264 |
| November, 1976 | 7 | 50 |
| December, 1976 | 15 | 75 |
| Total | 96 | 397 |

OBJECTIVE 3

Demonstrate on an incremental basis, the utilization of K-12 Career oriented curriculum resource units to meet the academic (reading, math) and career (developmental) needs of participating students in the Tri-County region.

A series of pretests was administered to two groups of students. One group, was identified as an experimental group and is to receive career instruction throughout the school year. The other group, a control group, will not be exposed to the career instructional units.

The Stanford Achievement Test was administered to all students to determine the achievement levels in the academic areas of reading and mathematics.

The Career Awareness Inventory was administered to all fifth grade students and the Career Maturity Inventory to the seventh and tenth grade students.

The following series of tables present the results of the pretesting by grade level and subtest score. These results were presented in average raw score units.

TABLE 2

Kindergarten Level Subtest Scores

| | Letter & Sound | Aural Comprehension | Mathematics |
|---|---|---|---|
| Experimental | 20.4 | 18.6 | 18.5 |
| Control | 22.1 | 20.5 | 21.0 |

TABLE 3

First Grade Subtest Scores

| | Letter & Sound | Aural Comprehension | Mathematics |
|---|---|---|---|
| Experimental | 29.5 | 18.6 | 28.4 |
| Control | 36.9 | 22.0 | 41.2 |

TABLE 4

Second Grade Subtest Scores

| | Reading | Mathematics |
|---|---|---|
| Experimental | 132.3 | 47.7 |
| Control | 143.4 | 55.1 |

TABLE 5

Third Grade Subtest Scores

| | Reading | Mathematics |
|---|---|---|
| Experimental | 144.0 | 88.0 |
| Control | 141.5 | 74.6 |

TABLE 6

Fourth Grade Subtest Scores

| | Reading | Mathematics |
|---|---|---|
| Experimental | 100.6 | 63.8 |
| Control | 92.7 | 59.1 |

TABLE 7

Fifth Grade Subtest Scores

| | Reading | Mathematics | Career Awareness Inventory |
|---|---|---|---|
| Experimental | 98.9 | 79.1 | 89.2 |
| Control | 84.1 | 66.7 | 79.3 |

TABLE 8

Seventh Grade Subtest Scores

| | Reading | Mathematics | Career Maturity Inventory |
|---|---|---|---|
| Experimental | 68.8 | 57.3 | 84.4 |
| Control | 60.8 | 58.1 | 81.2 |

TABLE 9

Tenth Grade Subtest Scores

| | Reading | Mathematics | Career Maturity Inventory |
|---|---|---|---|
| Experimental | 70.2 | 45.0 | 113.3 |
| Control | 60.2 | 35.5 | 99.8 |

The results of the pretests indicate that the differences between the control and experimental groups are significant and yet there is little consistency from grade level to grade level and group to group. These results indicate that the May post test scores should be analyzed by the analysis of covariance technique where significant differences occur. The adjusting or covariate scores for the post test scores will be the corresponding pre test scores.

OBJECTIVE 4

Provide inservice training to participating school district personnel and community representatives from the Northwest Tri-County Intermediate Unit region to encompass:

1. Career Education, Philosophy and Concepts
2. Career Education Methodology of Collaboration within the Educational System
3. Implementation Procedures of Curriculum Resource Materials
4. Community Relations and Resources
5. Utilization of Inservice Resources

Satisfactory progress has been made toward the achievement of this objective. A participant questionnaire has been completed by the participants of the Career Education Workshops that have been presented. The results of this questionnaire will be included in the final report of this project.

OBJECTIVE 5

Initiate a career education council to increase the level of interaction between participating local schools and the work community.

Progress toward the achievement of this objective has been initiated. Future meetings are scheduled with industrial, community and educational leaders. A questionnaire is being developed and will be administered to this group to gather further input relating to this objective. The results of this instrument will be presented in the final report. (This unit was deleted from the project by agreement of the project director and the project officer.)

# SUPPLEMENTARY EVALUATION DATA

## A PROJECT TO DEMONSTRATE INCREMENTAL IMPROVEMENTS

## in a

## K - 12 CAREER EDUCATION PROGRAM THROUGH AN EXEMPLARY MODEL

Grant #300760300

Northwest Tri-County Intermediate Unit
252 Waterford Street
Edinboro, Pennsylvania 16412

We, as third part project evaluators, respectfully feel that these observations should be of interest to the United States Office of Education.

Robert E. Connors

Robert J. Zanotti

April 1, 1977

The evaluators of the project have visited many classrooms in Intermediate Unit #5 where the K-12 Career Education model was being used. All classrooms that were in the experimental group or control group were visited; however, Career Education units have been used by many teachers in I.U. #5 who are not participating in the experimental phase of the program. To supplement the final evaluation report, the evaluators would like to present some observations made by them that are descriptive and pictorial in nature concerning the project.

While it has not been possible to statistically prove that reading and mathematics achievement have been improved by exposure to the project, the evaluators would like to present some observations that, educationally, have had impact on reading and mathematics in the various classrooms. For example, the two second grade classes at Asbury Elementary School took field trips to the local television station, a florist shop, the city traffic control center, a local hospital, the weather bureau and Mercyhurst College. Together, students and teachers planned these field trips, did extensive reading and wrote thank you letters. These experiences extended their learning from the classroom into the community.

Reading interests were stimulated indirectly by the units in other ways. For example, the evaluators were present the day that a state police helicopter landed on the school parking lot, as a result of a transportation occupations unit the second grade was studying. Every child in Asbury Elementary School went into the parking lot and had an opportunity to observe and ask the pilot questions. Did it influence reading? It sure did. The librarian reported that every book on helicopters, airplanes and other forms of air transportation were checked out of the library. There were no library books on these topics available during the next three weeks. This is a fundamental

way to stimulate reading; that is, to get the children to want to read about a topic. This improves reading!

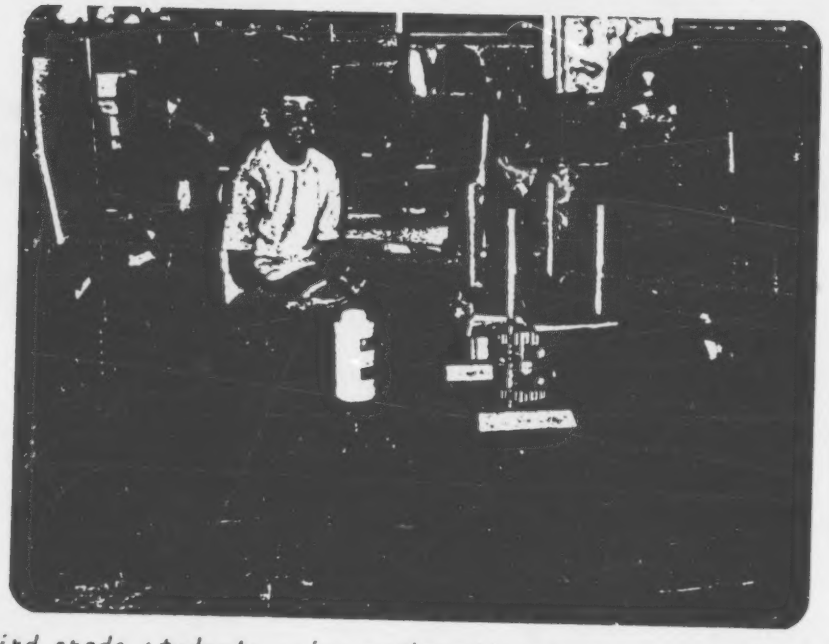
On page 3 examples of the effect that the career units had on reading is illustrated. Picture 3.1 is a bulletin board display in a kindergarten room. Notice the use of i.t.a. on the houses that resulted from a construction unit relating reading to the world of work. Pictures 3.2 and 4.1 are of a third grade class in Lake City, Pennsylvania. These children had been studying transportation in which their interest ranged far and wide. These pictures show a bookmobile, constructed by the pupils, that is used for reading groups. The evaluators observed that the children's interest in reading was stimulated by the desire to read in the bookmobile. They frequently asked when the bookmobile as to be "opened" for reading. There was a marked increase in reading as a direct result of this unit.

Interests and activities in mathematics were also stimulated by involvement with the computer-based career units. Picture 4.2 shows third grade children constructing a bridge. As a part of the construction unit many math skills were used. Picture 5.1 illustrates math related activities associated with the business unit. Picture 5.2 is a candy-making activity that involved measurement, counting, and recording. In all cases a high degree of interest in math was generated by these career education activities.

3.1 *Kindergarten room bulletin board dealing with construction occupations cluster.*

3.2 *A third grade reading group meeting in the bookmobile they built as a construction occupations activity.*

4.1 *Third grade students in "Reading Mobile" Construction Unit.*



4.2 *Third grade students using mathematics in a construction occupations activity.*

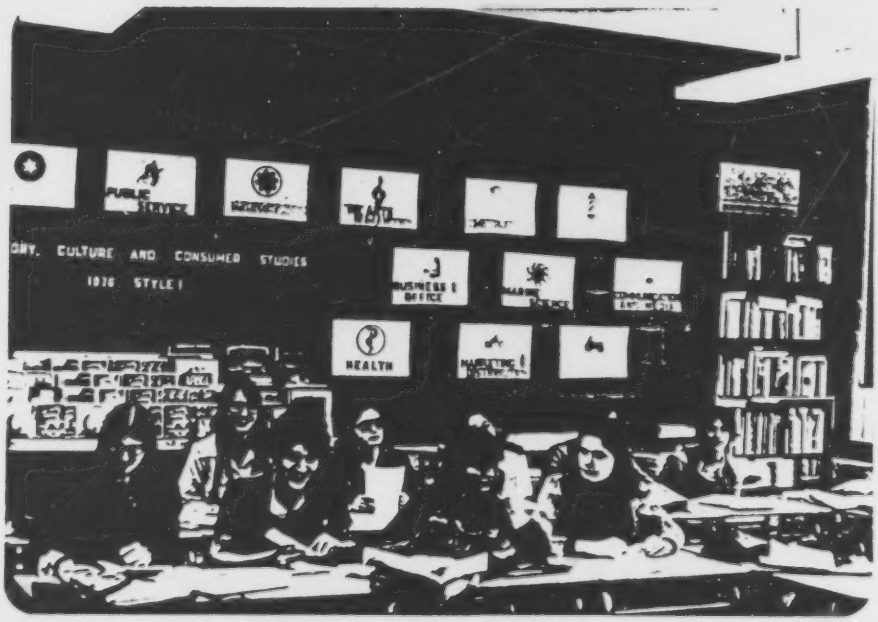
5.1 *Mathematics activities related to a Business and Office occupations unit.*

5.2 *Applying measurement during a candy-making activity. The candy was later counted, packed in Easter baskets and packaged to be distributed to area children's and old people's hospitals. This was a career education activity dealing with mass production and volunteer, or unpaid work.*

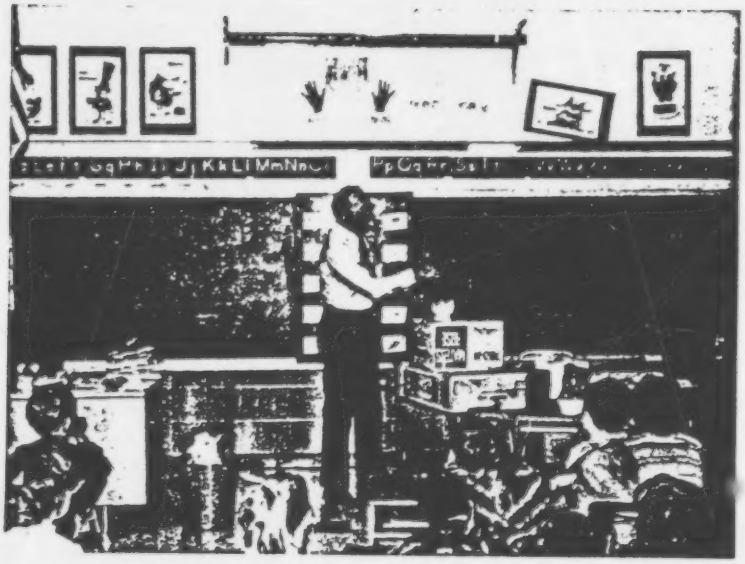
Activities at the secondary school level are shown on the next page by pictures 7.1 and 7.2. These pictures show a high school class in consumer education at Ft. LeBoeuf at Waterford, PA. Note the 15 career cluster posters on the wall. These students were learning to manage a ficticious paycheck which included checking accounts, savings accounts, payment for food, clothing, shelter, recreation, etc. Interest among the students was rated as being extremely high. Students also voiced opinions that such activities were realistic and meaningful.

Many activities have grown from the study of the Computer-Based Career Education units that have had a significant impact on student interests and learning. For example, the children in the second grades at Asbury Elementary School applied to the local Rotary Club for a grant to construct a greenhouse. Their proposal was accepted and funded. This has resulted in having resource people speak to the children about the world of work as related to the greenhouse industry. Picture 8.1 shows a local florist demonstrating flower arrangement to the second grade class. Many other aspects of the florist business were discussed. Picture 8.2 reveals a television technician demonstrating the use of a video-tape camera to the second grade students. The students then participated in additional activities in the area of television and communication. All students involved in these units activities seem to be interested in their projects, school in general, and in learning about the world of work.

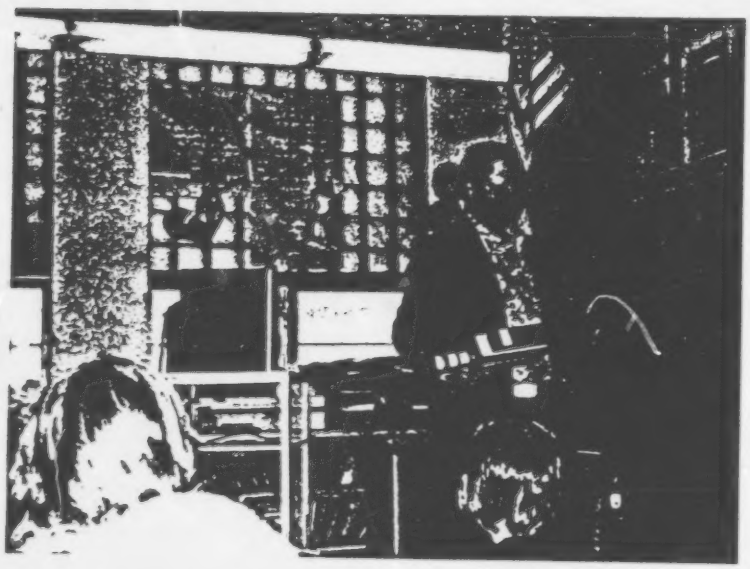
7.1 Senior high students studying consumer education.




7.2 Education is related to the real world for these senior high school students.... a world they will soon enter as consumers.



8.1 Local florist enriches classroom instruction. This demonstration grew out of a career education unit.



8.2 The world of work comes into the second grade. Television technician demonstrates using a video-tape camera after a field trip to a local television station.

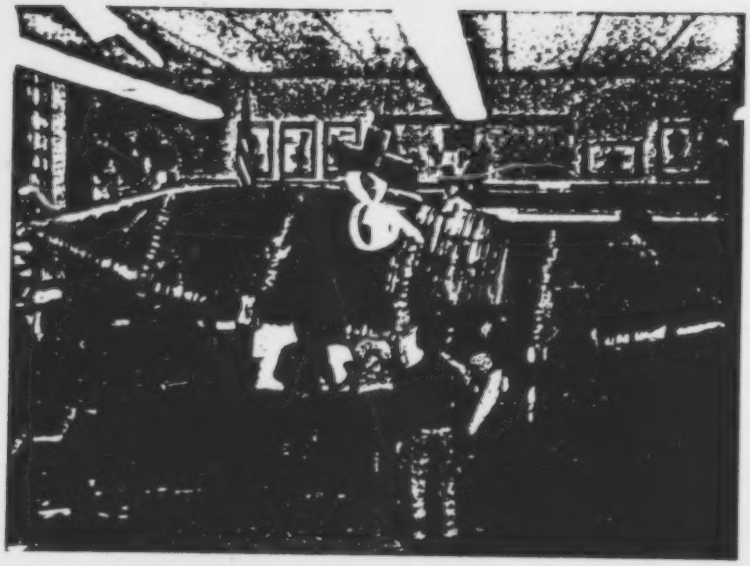
Dissemination of information has occurred through a variety of approaches. The early inservice programs consisted mainly of a lecture type of presentation supplemented by colored slides. Subsequent orientations were improved via feedback of participants and reorganization by the staff responsible for such presentations. It is interesting to note (see Picture 10.1) that later workshops included participation by the orientees. Pictures 10.2 and 11.1 show students constructing a bubble made of plastic where undersea life could be simulated. This project was duplicated by teachers in a workshop to illustrate how career education can be used in the classroom. This project was originally developed by the children in the second grade at Asbury Elementary School.

Parents were also exposed to career education through the project. Picture 11.2 shows how mothers of the students in these classes were involved in the second grade candy-making project previously discussed. Such involvement helped to generate community support for the career education project and to motivate parents to employ the career education concepts into learning situations at home.

Further dissemination of career education occurs through the exposure of undergraduate education majors to the unit activities. Student aides who are assigned to local schools in conjunction with college field experience courses help construct bulletin boards relating to career education. Picture 12.1 shows a construction bulletin board completed by pre-professional aides.

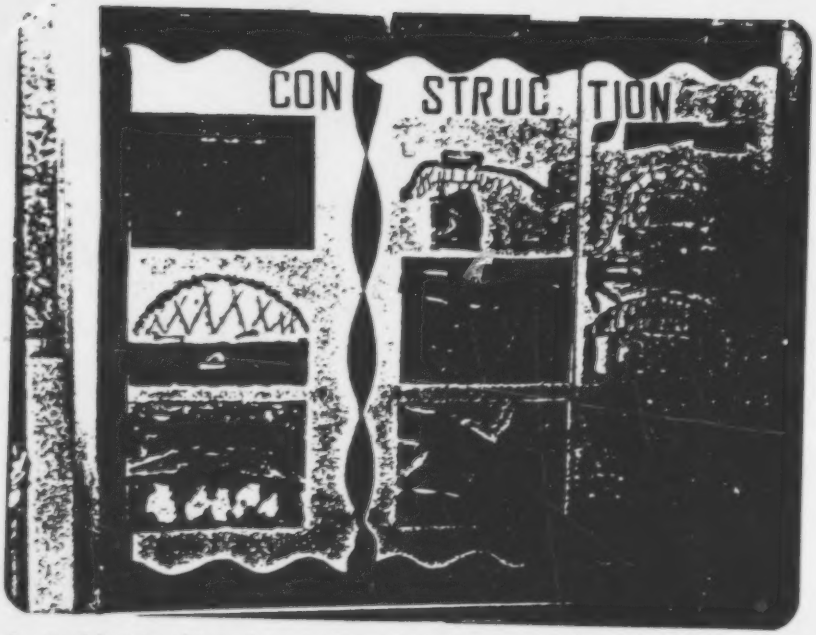
10.1 Teachers during an orientation to career education at I. U. #5. Note that the teachers are "doing" ---- compare with 10.2.

10.2 Second grade children constructing a plastic bubble to simulate undersea life during a Marine Science unit.



11.1 Plastic bubble almost completed by second grade students during a unit on Marine Science.

11.2 Mothers involved with children during a candy-making activity from a career education unit.

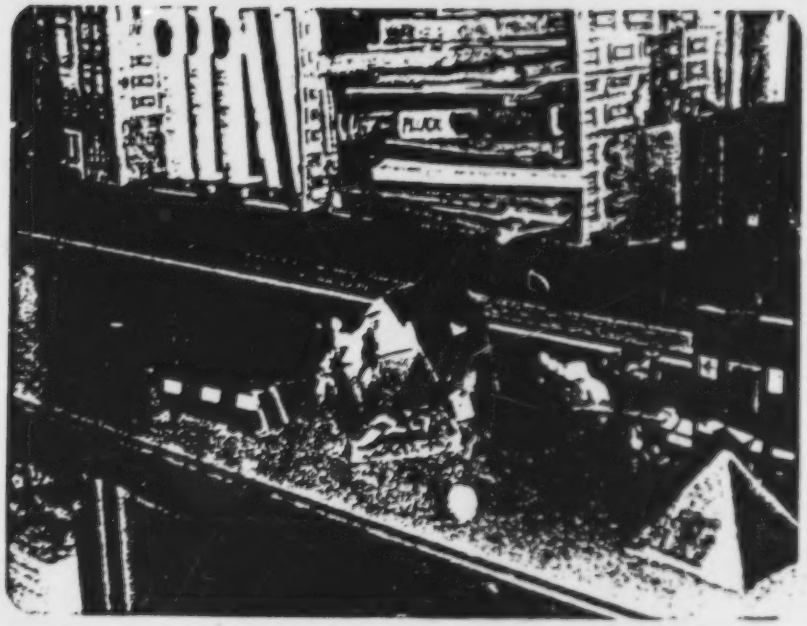



12.1 Bulletin board constructed by a student aide in pre-student teaching experience.

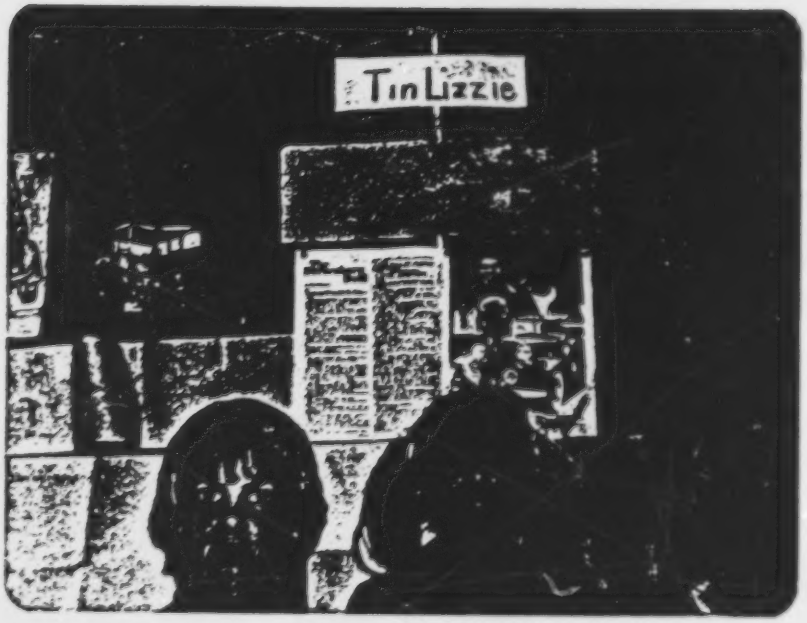
12.2 Teacher made bulletin board for second grade. This bulletin board grew out of a hummanities unit. Career education leads to many fascinating areas of learning.

The evaluators have observed many spin-off effects, that result in additional learning experiences, as an outcome of using the career education units. A group of second grade children studying a unit in the humanities became interested in prehistoric animals, clay modeling, sculpturing, and prehistoric man. 12.2 shows a bulletin board that was developed as a result of this unit. Illustrations 14.1, 14.2, 15.1 and 15.2 show the kinds of interest in work that was done by a third grade class who initially studied construction. While it can not be measured, the enthusiasm of the class was infectuous when discussing their work. Those attitudes that the children displayed indicated that what they were doing they felt was worthwhile - this may be the essence of good education.

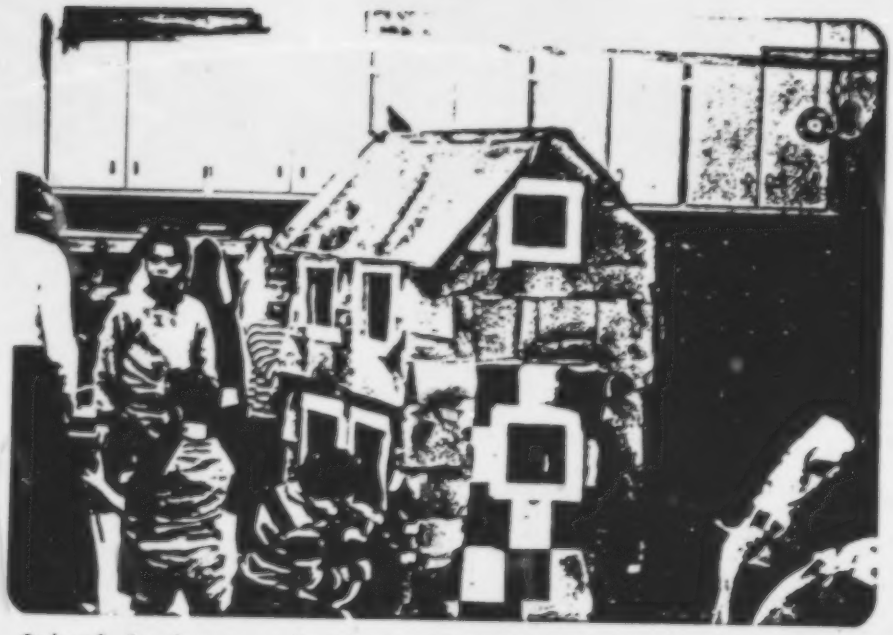
The examples contained in this supplement are illustrative of the many activities taking place in the schools of Northwestern Pennsylvania. The pictures were taken in representative classrooms where the career education activities are happening as a result of involvement with the K-12 Exemplary Model.



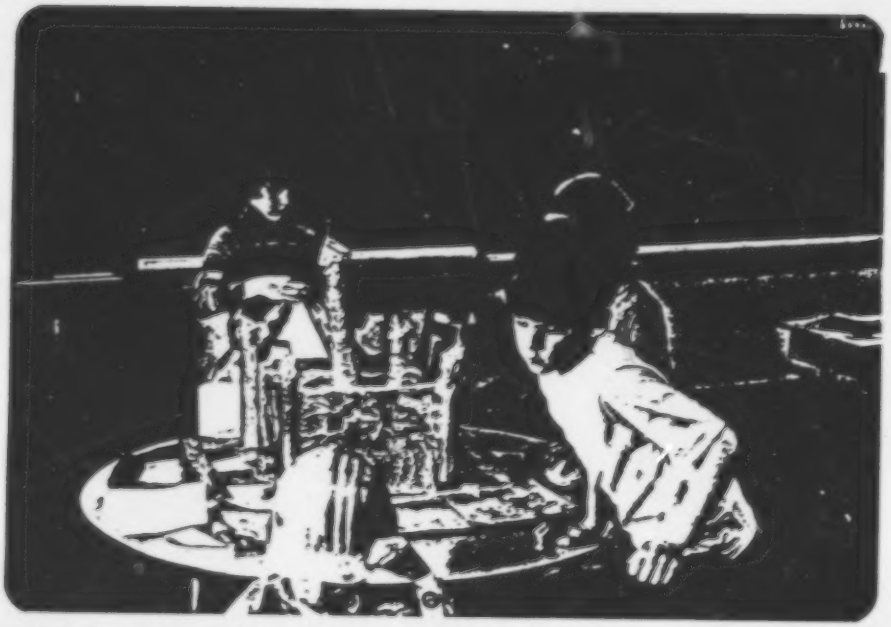
14.1 *Student interests take many forms when studying career education. Third grade work.*




14.2 *We are proud of our work.... said these third grade students. In studying construction we learned history and "all about" cars.*



15.1 School is fun.... to these second grade students. They work with their hands as well as with their heads. Unit on construction.



15.2 Third grade unit on construction. History, measurement, reading, and art are related to this career education unit. School is fun.

## K-12 CAREER EDUCATION DEVELOPER QUESTIONNAIRE

1975 - 76

The purpose of this questionnaire is to obtain information from the developers of the units in the K-12 Career Education Project. This includes the experience which you as a teacher have gone through in developing a Career Education unit. The following questions represent an effort to determine some professional feelings and opinions related to the project. Please answer these questions to the fullest extent possible. It is through your response that the project will be continually improved. Please return the completed form to the Career Education Office at the Northwest Tri-County Intermediate Unit.

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

NAME _____

PRESENT POSITION _____ SCHOOL DISTRICT _____

TITLE OF THE UNIT YOU HELPED DEVELOP _____

For each of the following statements, indicate your reaction by checking the appropriate space which most nearly reflects your feeling toward each question.

SA - denotes strong agreement with the statement

A - denotes mild agreement with the statement

N - denotes neutral

D - denotes mild disagreement with the statement

SD - denotes strong disagreement with the statement

You are encouraged to elaborate on your reaction in the space provided after each item for questions 13 - 17. Please attach any additional comments or suggestions.

| | SA | A | N | D | SD |
|---|---|---|---|---|---|
| 1. I was given sufficient information about the project (i.e., topic and format) prior to beginning my work on the units. | — | — | — | — | — |
| 2. I was given ample opportunity to define the scope and focus of the Career Education Unit which I helped develop. | — | — | — | — | — |
| 3. There was an atmosphere of mutual respect and cooperation between myself, the project staff, and consultants. | — | — | — | — | — |
| 4. There were available, most of the human and material resources I felt necessary for developing the unit. | — | — | — | — | — |
| 5. There was an opportunity to test ideas regarding the unit in real situations or obtain factual information concerning their worth or effectiveness. | — | — | — | — | — |
| 6. Progress was continually assessed by all active participants throughout the program. | — | — | — | — | — |
| 7. There was adequate coordination among the various groups working on different units. | — | — | — | — | — |
| 8. There was adequate coordination among those working on a single unit within the development phase of the project. | — | — | — | — | — |
| 9. I felt my activities were significant and meaningful to the project. | — | — | — | — | — |
| 10. The philosophy and concepts of career education were taken into consideration in the development of the resource unit. | — | — | — | — | — |
| 11. The make-up of our group was sufficiently diverse to provide an adequate cross-section of opinion and expertise. | — | — | — | — | — |
| 12. The unit was broad and extensive enough to meet the needs and interests of individual students. | — | — | — | — | — |

PLEASE ANSWER THE FOLLOWING QUESTIONS BY CHECKING THE YES OR NO BLANK.

| | YES | NO |
|---|---|---|
| 13. As a result of your experiences in this project do you possess different ideas, persuasions, and viewpoints about career education? If so, please list some examples. | ___ | ___ |
| 14. As a result of your experiences in this project are you more aware of problems and potentials of career education as this relates specifically to your own school and classroom? If so, what kind of problems? | ___ | ___ |
| 15. As a result of this experience do you anticipate your classroom methodology will be altered? If so, please describe. | ___ | ___ |
| 16. As a result of this experience are you more willing to work with others to solve other instructional problems? If so, what type of instructional problem? | ___ | ___ |
| 17. In your opinion, in building the resource unit, was concern given for individual pupil differences and growth? To what degree? | ___ | ___ |

Teacher Responses to Career Education Developer Questionnaire

Listed below are the comments made by teachers to the developer questionnaire. Questions 1-12 did not request comments by respondents.

| No. | Question | Multiple Responses |
|---|---|---|

13. As a result of your experiences in this project do you possess different ideas, persuasions, and viewpoints about career education? If so, please list some examples.

Elementary

My viewpoints were changed to the importance of career education, being introduced in kindergarten more fully.

It's not a separate subject matter - integration - building awareness, not teaching an occupation to sell it.

Career education can be effectively presented to students in the course of the regular instructional day.

They basically remain the same.

I now feel confident in career education activities. I know their purposes and am more aware of the total career education program in the elementary grades.

Its importance in early years - exposure to career education broadens their scope.

Career education should be a normal result of discussions in each subject. Career education should never be a forced, out-of-context, set-apart period of the school day.

I feel it needs to be made a larger part of the elementary curriculum.

Career education should be integrated into the curriculum. Units provide opportunity to pick and choose activities.

I can see how it can be incorporated into the classroom daily. I also like the use of basic skills in the program.

Secondary

This may have been true on the first few I worked on career education projects but by now I am strongly in favor of career education.

This project made me appreciate the necessity and importance of career education.

I have always stressed vocational interests and goal orientation to the work ethic in all social studies classes - I enthusiastically approve of this type of education.

I've a far better grasp of what career education is - also I've found it easier than expected to implement in my classroom.

I have always had a firm belief in the merits of career education.

It is important in early years - exposure to career education broadens their scope.

| No. | Question | Multiple Responses |
|---|---|---|

14. As a result of your experiences in this project are you more aware of problems and potentials of career education as this relates specifically to your own school and classroom? If so, what kind of problems?

Elementary

I'm more inclined to talk about the various types of work, instead of the old traditional ones.

The problems of scheduling are more easily overcome as it integrated itself. High potential because of student interest.

Solving the time, abstract problem to incorporate career education.

I am more aware of the different fields and occupations involved in the job cluster of transportation. I will attempt to utilize the resource persons to a greater extent.

I have a more complete understanding of the objectives, I want to reach on my grade level.

No comment

We need to list resource people in the community and keep it on file. Due to our large number of industrial plants we could build an extensive file.

Career education should be a part of our curriculum.

Potential is there, but co-operation isn't. (Among people in the school systems)

Most children in this rural school have very little contact with career opportunities. Through this program they can at least experience some contact.

Secondary

Trying to implement these units into our existing curriculum.

Main difficulty - lack of sufficient time for all the possibilities.

Most teenaged youngsters are not aware of the vast differences in the various career occupations available to them in their own communities. These youngsters are learning a new respect and interest in their local and state affairs.

That it could become an end unto itself.

A great deal more effort needs to be spent on educating teachers on how to bring career education into the classroom.

I'd taught career related courses for past 3 years and was aware of problems.

| No. | Question | Multiple Responses |
|---|---|---|

15. As a result of this experience do you anticipate your classroom methodology will be altered? If so, please describe.

Elementary

Yes. I will use more individual activities with a wider range for ability.

By always keeping that career education awareness 1st - more alert to it - encourage it in lessons.

Neutral.

Not applicable.

When the units are available.

I will now use career education activities in coordination with my regular classroom subject areas.

Much more emphasis on what is work - why do we work, etc.

I can now easily experience career education with my children on a spontaneous basis.

I am more aware of resources which might be available.

The only change will be incorporating the career education program.

Secondary

I feel I am already doing what I can for career education within the framework that I must operate under.

Because it would be difficult to use the units in a language (foreign) class but I would stress careers for language majors.

Even though I have stressed this before, I now have an evaluative instrument to bring about more efficient instruction in career education.

I've already begun to think almost entirely in terms of careers and how they may be made applicable to the content I wish to cover.

Increased use of career education resource units as they become available.

| No. | Question | Multiple Responses |
|---|---|---|

16. As a result of this experience are you more willing to work with others to solve other instructional problems? If so, what type of instructional problem?

Elementary

I'm more willing to share ideas I use in my room than I used to be.

None specifically - I'm just learning more about various people and feel I can work well with them.

Use of time.

Building interesting projects into existing units.

Allowing for more individual differences in instructional planning.

Always willing.

Mainly incorporation of such programs.

Secondary

Possibly in the area of trying to get our district to do more than team teaching.

Not necessarily - I've always been willing to work with others.

Update the traditional history curriculum to include awareness of career opportunities as well as cultural differences - to enrich the students life as a member of today's complex society.

How to make my courses more meaningful and interesting to the student. How I can vary my presentations to the class.

The project makes you more aware of the value of other teachers ideas, solutions, and experience.

Meeting the general students whose goal is to go out and get a job.

## K-12 CAREER EDUCATION USER QUESTIONNAIRE

1976-77

The purpose of this questionnaire is to obtain information from the users of the K-12 Career Education Project. The following questions represent an effort to determine some professional feelings and opinions related to the project. Therefore, your answers should reflect to the fullest extent possible your professional opinions about the project. It is through your responses that the project will be able to be continually improved. Please return the completed form to the Career Education Office at the Northwest Tri-County Intermediate Unit.

NAME_____ DATE_____

PRESENT POSITION_____ LOCATION_____

WHICH OF THE UNITS DID YOU USE?_____

AT WHAT GRADE LEVEL WAS IT USED?_____

DID YOU ONLY USE THE TEACHER PRE-PLANNING PRINT-OUT_____

PLEASE ANSWER THE FOLLOWING QUESTIONS BY CHECKING THE YES OR NO BLANK

You are encouraged to elaborate on your answers in the space provided.

| | YES | NO |
|---|---|---|
| 1. In your opinion was this unit oriented toward career awareness, exploration or preparation for your students? | ___ | ___ |
| 2. Were you given sufficient information and guidance prior to using and during the use of the units? If no, please explain. | ___ | ___ |

| | YES | NO |
|---|---|---|
| 3. Would you consider a laboratory, demonstration class, or other in-service training of value in helping you to learn how to implement units? Please explain. | ___ | ___ |
| 4. Do you possess different ideas, persuasions, and viewpoints about career education and its processes since your experiment with the guide and unit? Please explain. | ___ | ___ |
| 5. Are you more aware of problems in education and career education specifically in your own school and classroom as a result of using the guide? If yes, please explain. | ___ | ___ |
| 6. Did you select and request individual student print-outs? If so, how many? If not, why? | ___ | ___ |
| 7. In your print-out for individual students, were the number of suggestions relating to content, activities, materials, and measuring devices sufficient? If no, please explain. | ___ | ___ |
| 8. Did you experience difficulty in obtaining the materials listed in the unit? If yes, please explain. | ___ | ___ |
| 9. If you did not use individual student print-outs, did you find the pre-planning guide helpful? If so, in what way? | ___ | ___ |

| | YES | NO |
|---|---|---|
| 10. Are you planning to use this career unit again? | ___ | ___ |
| 11. Would you like to use other career units designed within this format? | ___ | ___ |

12. In your opinion, what are the strong points of these units as they relate to career education?

13. In your opinion, what aspects of this career unit should be altered or improved?

14. How do you feel the children reacted to the materials and methodology of this unit? Describe briefly.

15. How might you incorporate career education concepts into your classroom in the future in addition to the computer unit approach?

Teacher Responses to Career Education User Questionnaire

Listed below are the comments made by teachers to the user questionnaire. Questions 1, 2, 6, 10, and 11 did not request comments by respondents.

| No. | Question | Multiple Responses |
|---|---|---|

3. Would you consider a laboratory, demonstration class, or other in-service training of value in helping you to learn how to implement units?

Elementary

Self-explanatory - wealth of information.

Units provide flexibility.

Inability to go "in-depth" with units due to classroom set-up and time element.

Units easy to implement.

Secondary

Would benefit to introduce teaching techniques.

Promote teacher awareness of career education.

Teachers want to be on their own.

Confidence in original unit.

Needs deeper explanation.

| No. | Question | Multiple Responses |
|---|---|---|

4. Do you possess different ideas, persuasions, and viewpoints about career education and its processes since your experiment with the guide and unit?

Elementary

Unit supplies most basic information.

Great student interest - will incorporate career education in all classes and with as many topics as possible.

Had experience with career education.

Do not feel that this is important in Kindergarten level.

Awareness of career education. (2)

Elementary Education must learn basics first and then may benefit from career education - great for above average students.

Secondary

Career education importance in the classroom.

Not different viewpoints, but more ideas.

Career education goal is worthwhile.

Implementation of the unit material was much easier than expected.

Gained ideas of how to incorporate career education into basic classroom work.

Career education should be incorporated into Special Education.

Have had experience with career education.

Units are much too limited.

| No. | Question | Multiple Responses |
|---|---|---|

5. Are you more aware of problems in education and career education specifically in your own school and classroom as a result of using the guide?

Elementary

Not enough exposure or awareness of career education and careers.

Lack of basic career information - not found in curriculum, in texts, or in classroom teaching.

Do not have the time to overload myself beyond my regular schedule for career education.

Secondary

Lack of community resources.

Career education should be made a "school wide" effort.

Realization of the great potential that exists in this program.

Career education can be incorporated in classroom activities but not in 1st grade effectively.

Shame students are normally chained to their desks.

Outlook is quite limited in terms of professional choices and goals in career education.

Very thorough courses in career education are offered - i. e. job education.

We need more career education.

Career education must start at an early age.

Need to touch more areas of career education.

| No. | Question | Multiple Responses |
|---|---|---|

7. In your print-outs for individual students, were the number of suggestions relating to content, activities, materials, and measuring devices sufficient? If no, explain!

Elementary

Too much reading for the students.

Print-outs created much enthusiasm in students.

Usually - some were unmeasurable.

Secondary

At times there were too many suggestions - this was due to checking off too many interests and objectives.

Makes individualization much easier.

Did not use print outs.

Content was irrelevent - activities were unrelated - no activities.

| No. | Question | Multiple Responses |
|---|---|---|

8. Did you experience difficulty in obtaining the materials listed in the unit? If yes, explain!

Elementary

Most materials were used from school library or at home.

Very few materials available.

Secondary

This unit was specifically built for the Meadville area resources.

Resource and reference books and materials presented problems due to class size, personal sign outs, etc.

Hard to choose proper materials.

| No. | Question | Multiple Responses |
|---|---|---|

9. If you did not use individual student print-outs, did you find the pre-planning guide helpful? If so, in what way?

Elementary

Offered examples of how to individualize in smaller groups.

Great activities for groups.

Both quite helpful in large and small groups.

Individual print-outs were very helpful.

Prefered pre-planning guides - had many more group activities.

Secondary

Activities suggested in the pre-planning guide frequently satisfied the interest of students.

Listed general type of activities.

Chose more challenging materials for more advanced student - worked great.

Enabled me to use it as part of a lesson.

| No. | Question | Multiple Responses |
|---|---|---|

12. In your opinion, what are the strong points of these units as they relate to career education?

Elementary

The strong points are the practicality of the unit as they relate to math. It makes the child more interest in the work - a new approach.

Activities - things to actually do instead of just talk about - suited to individual interests of everyone involved.

Children's awareness of variety of work done in one certain area - variety of activities - excellent organization.

They correspond to the materials being covered and demonstrate the different opportunities that are available to them.

Condensed form is very useful, very informative with new ideas, make children more aware of health careers.

The children were able to research, explore ideas and make something themselves: different types of houses, homes through the years.

The varied ideas.

Wealth of materials - easy understandability of print-outs - individual print-outs as well as preplanning guide.

Individualization - pre-planned unit and materials. (2)

Secondary

With some revision, they could reach many students.

The units appeal to the students because they know the computer printed the information just for them!

Individualized - appeals to student's interest areas. (2)

Reference materials - activities - clear precise objectives.

Real to life projects (examples).

The suggested activities for a particular unit are flexible enough to use in other classes in specific areas.

Create at least a minimum amount of awareness of career needs in students.

Relevancy in the classroom.

Varied subjects, ability levels, and met individual needs.

Bringing out for the students, the many "inner-processes" needed to be developed in career education process.

Give more ideas than one teacher comes up with.

Students can actually do the work or something related to the work that is involved in the career they are interested in.

The students realized that regardless of their interests and career aspirations, any field of science could possibly provide interesting and related job opportunities for them. This can obviously hold true for other subjects.

We are especially interested in the exercises that allow the students to go out to interview, observe and experience job possibilities.

| No. | Question | Multiple Responses |
|---|---|---|

13. In your opinion, what aspects of this career unit should be altered or improved?

Elementary

Construction - recreational activities of construction workers doesn't have much to do with the topic.

Salaries - as recent as possible - and educational needs should be included.

More descriptions such as art diagrams to explain projects. In kindergarten should concentrate more on large group activities.

I have had the children do project unit of Conservation, especially wildlife. We use materials and ideas from the American Federation of Wildlife in D. C. and the Pennsylvania Game Commission. Andy Martin is our source man and speaker.

Some of the activities were so similar they could be depleted.

All okay by me.

Bad aspects were minimal.

Secondary

Revise each year if possible. (2)

Resource material.

More A-V selections - a reference guide to order materials concerning career education.

In my opinion, I was not given sufficient explanation of the program. It seems to me that the IU people didn't care to walk through the program with me. All they did was throw materials (mainly teacher's print-outs) out to me. They did not sufficiently explain how to use the program. I feel I cannot answer any of the other questions due to the insufficient way the program was handled. It seemed to me that the IU people didn't know how to use the program themselves.

A more direct tie-in with occupations for each activity.

Try to fill in gaps as they exist as a math teacher I prefer more problems to solve than explore.

None at this time.

More detailed and this unit did not deal with credit in its scope at all.

More specific in some activities.

For our school district, remove numbers of field trips, resource places and people outside of immediate area.

I felt that many of the activities were geared too high for my students reading levels, etc.

Hard to say since I only used teacher guide.

Areas of the student request form (elementary) were difficult to complete, especially general interests section. This resulted in several students receiving the same print-out. Also, the selection of topics must be broadened to cover more areas.

More current sources of information.

Perhaps separating career ideas under specific headings would be helpful. I found it hard to locate some projects because they were all mixed in together.

| No. | Question | Multiple Responses |
|---|---|---|

14. How do you feel the children reacted to the materials and methodology of this unit? Describe briefly.

Elementary

Very enthusiastic - enjoyed choices of projects at learning centers.

They enjoyed the games and new suggestions. Some said, "I'm going to be a nurse because I can read numbers well!"

Extremely excited at first - as novelty wore off, so did interest in many cases.

Seemed to enjoy learning more about health (other than doctors and nurses), opened their minds to new ideas .

The children were excited. They like to do things with their hands (construction). In fact they were disappointed if they could not work on a certain project. We try to do something every Thursday.

Very enthusiastic. (2)

Very enthusiastic and self-motivating due to individualization.

Unit had high motivation - activities were interesting and educational.

Secondary

Didn't use.

They didn't know how to react to something they had to do on their own.

With some interest. (2)

Favorable. (2)

Enthusiastic, motivated; they can see a sincere attempt by the teacher to relate to their interests.

Ambiguously.

Very well.

Poor activities - poorly.

They liked it as a one shot deal unit. It helped motivate. Would never use it more than once a year. There is a need at junior high level for a variety of methods.

Too difficult - some gave up.

The response was much greater than I anticipated. Providing students with a choice of projects gave them freedom of selection --- something they seemed to really appreciate. I sincerely believed this resulted in an increase in student interest and a new attitude toward science for some.

Most of the students seemed to enjoy the use of these. They enjoyed working on the activities that they felt were interesting.

In the few times we showed the packets to the students, they were overwhelmed with so much reading. Seems to be better if we use this as a teacher tool. If we pick a few exercises and let them choose one it seems to work much better.

Lost at first, and then interested. Not my style to force assignments on students.

| No. | Question | Multiple Responses |
|---|---|---|

15. How might you incorporate career education concepts into your classroom in the future in addition to the computer unit approach?

Elementary

I will encourage outside resource persons and parents to come in and share their experiences.

By using films and filmstrips - having people come in and talk to children.

More field trips and resource people - send for information to Health, Education and Welfare Department.

Probably the way I suggested in # 13 (use materials and resources from various organizations, etc. and people from area) - There should be some way to correlate with each unit in our 5th grade social studies book: Our Country (U. S.). In total, I enjoyed this and I know the children did too.

Along with social studies and reading units.

General discussions - field trips - speakers. (2)

Secondary

I don't know.

As a guide to my teaching lessons as help to get to the students.

I don't have immediate plans for other approaches.

Write our own materials or activities.

To go into this point would take too long because I teach a course for the year concerning career education called Job Education.

I only have been writing my own career education activities for quite some time now - only use the computer units once in a while.

Write your activities - using computer unit as a start.

In conjunction with guidance department.

Use ideas when writing my units.

Perhaps by using only such as the teacher's guide for all of class to pursue a variety using individual research projects - I'd still prefer the computer method.

Decision-making, values, goals, liking yourself, etc. (personal development) must be stressed more - students need this direction early.

I plan to take time after each unit (in different classes) to discuss different career possibilities related to that unit.

I designed numerous optional projects and activities students could pursue related to the subject area. Many students elected to use these in addition to computer print-out activities. I believe my suggestions were more individual than those on the print-outs, but I found both to be equally effective .

That is one of the main thrusts of our program. We incorporate field trips, interviews, with various people, and pairing students with people in occupations the students wish to explore.

Appendix E

The reading and mathematics achievement of the students was assessed by the Stanford Early School Achievement Test (SESAT), the Stanford Achievement Test (SAT), and the Stanford Test of Academic Skills (TASK) in K-1, 2-7, and 10 respectively. Only those portions of the test relating to reading and mathematics were utilized in this study. The testing levels are listed below.

| Achievement Test | Grade Level |
|---|---|
| Stanford Early School Achievement Test | |
| Level I | K |
| Level II | 1 |
| Primary Stanford Achievement Test | |
| Level I | 2 |
| Level II | 3 |
| Level III | 4 |
| Intermediate Stanford Achievement Test | |
| Level I | 5 |
| Advanced Stanford Achievement Test | |
| Stanford Test of Academic Skills | 7 |
| Level I | 10 |

Since each of the testing levels has a slightly different purpose, the test rationale of each is summarized below:

Stanford Early School Achievement Test (SESAT)

The underlying philosophy of the Stanford Early School Achievement Test considers the period of entrance into kindergarten through first grade to be one of the most important developmental periods in the child's life. The SESAT provides a measure of the cognitive abilities of children of this age range. This level is also designed to assess the background of experience in order to establish a baseline where instruction may begin.

Stanford Achievement Test (SAT)

Primary Level Battery

Intermediate Level Battery

Advanced Level Battery

A major goal in the construction of the Stanford Achievement Test (SAT) is that the content of the test would assess contemporary instructional objectives and measure what is presently being taught in the schools. "A thorough analysis of 1) the most widely-used series of textbooks in the various subject areas; 2) a wide variety of courses of study and 3) the research literature pertaining to children's concepts, experiences, and vocabulary at successive ages of grades "preceded the revision of this new edition of SAT (p. 7 Norms Booklet, Form A, Manual Part II).

Stanford Test of Academic Skills (TASK)

Stanford Test of Academic Skills provides a range of achievement measurements in reading, English, and mathematics to be administered in these basic skills areas after adequate instruction has been completed. TASK is not designed as a comprehensive achievement test, but rather gives an indication of a student's literacy level and his ability to master tasks of the future, whether it is higher education, a job, or home and family responsibilities.

# Appendix F

## Individualized Career Test

### Kindergarten through Fourth Grade Instrument

These tests were developed by the evaluators and consisted of a series of scenes depicting work and non-work activities. The scenes were shown to the students individually. The instrument was designed to measure the awareness of the student's career concepts as related to the units in the project at each designated grade level. Administration of the instrument took place when the instructional portion of the project units were completed. Testing took place at all grade levels for experimental and control groups at approximately the same time.

Miniature copies of the scenes used in the instrument are found in Appendix F. Actual questions and procedures used in the individual testing are included.

GRADE LEVEL CONCEPT QUESTION, K

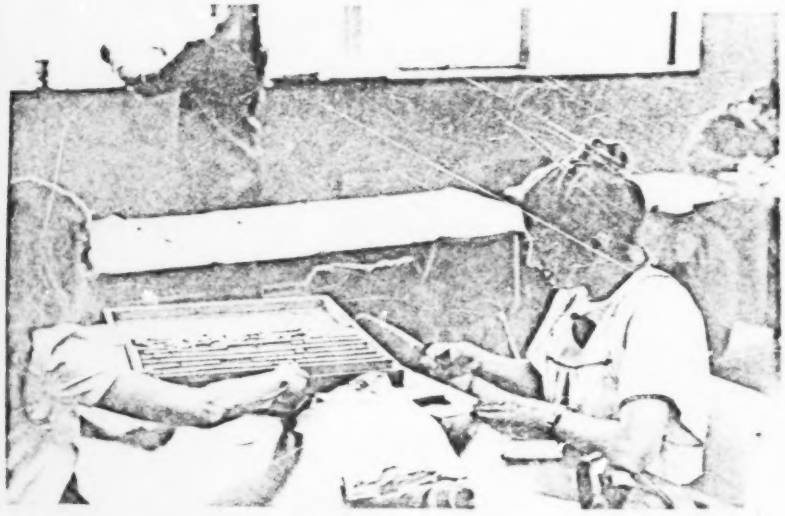
Kindergarten, What is work? (possible 6 points)

A. Instruction:

Place in a pile all the pictures that show people at work.

B. Scenes

1. Typist (W)
2. Butcher (W)
3. Mechanic (W)
4. Students at project (?) Why did you give this answer? Classification
5. Woman at coffee urn (N)



GRADE LEVEL CONCEPT QUESTION, K

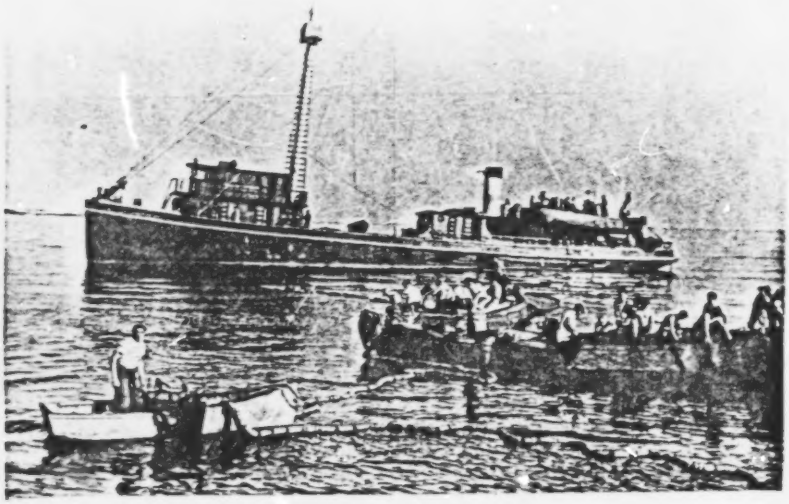
Kindergarten, What is work? (possible 6 points)

A. Instruction:

Which of the following pictures show offices or businesses that might be found in Titusville, Meadville, etc. (depending on locale)

B. Scenes

1. Gas station (Y)
2. Fishing fleet (N)
3. Factory assembly (N) Why did you give this answer? (Bonus)
4. Real estate office (Y)
5. Ice cream shop (Y)



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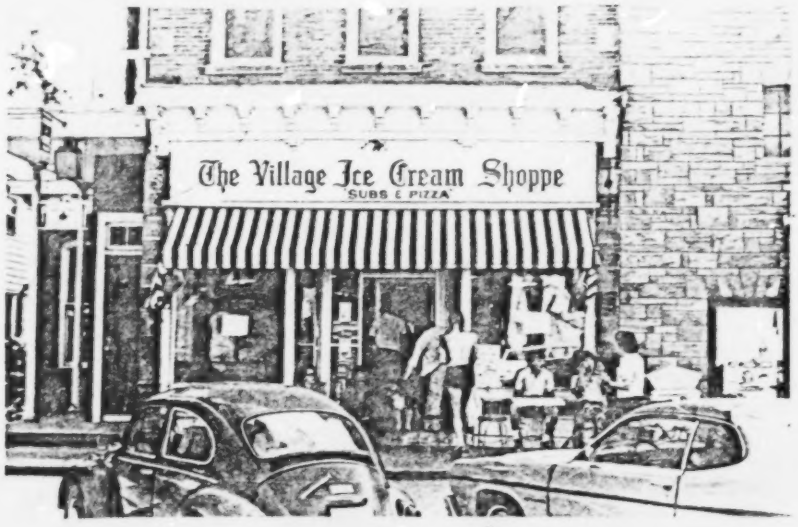
REAL ESTATE


The Village Ice Cream Shoppe
SUBS & PIZZA

GRADE LEVEL CONCEPT QUESTION, K

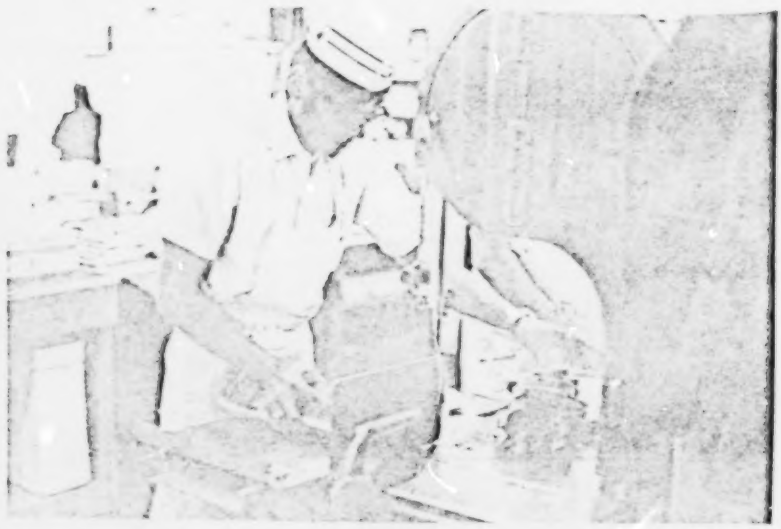
Kindergarten, What is work? (possible 5 points)

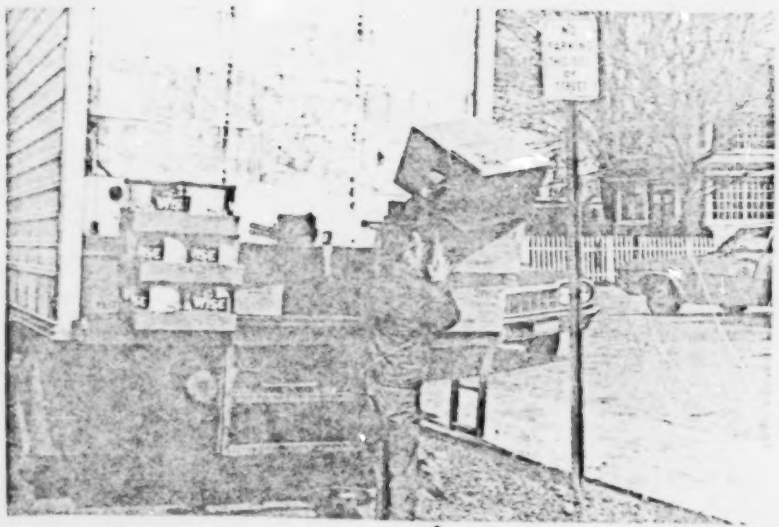
A. Instruction:

Please tell me the duties (or jobs) of each of the people shown in each of the pictures. (Pupils must indicate at least one definitive duty.)

B. Scenes

1. Gas station attendant
2. Lumberjack
3. Doctor/Scientist
4. Meat Cutter/Butcher
5. Delivery man/Truck driver





GRADE LEVEL CONCEPT QUESTION, K

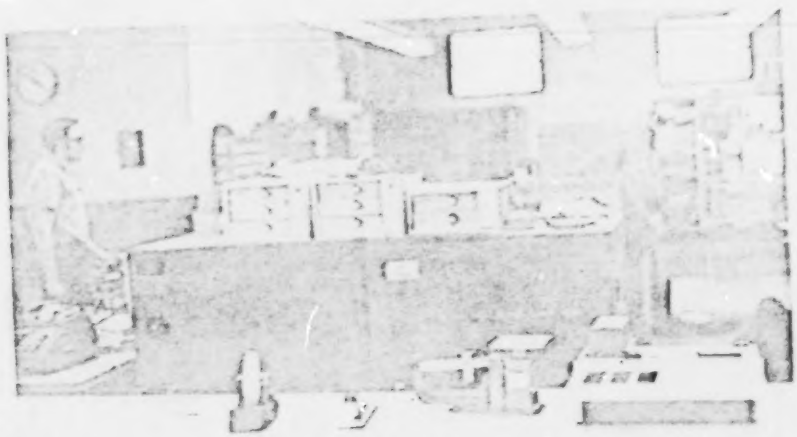
Kindergarten, What is work? (possible 6 points)

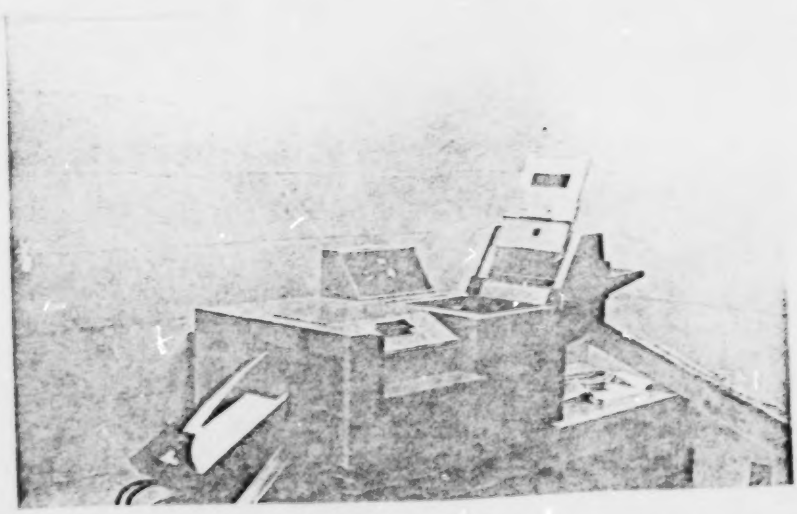
A. Instruction:

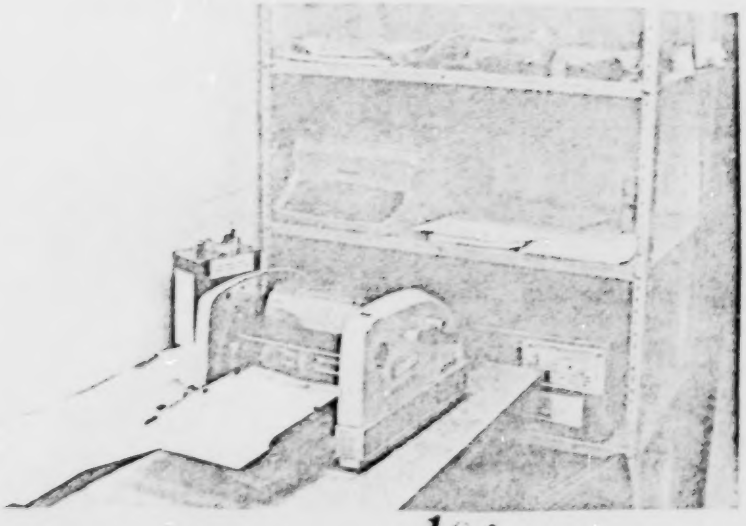
Which of the following pictures show machines and equipment that would be found in most offices?

B. Scenes

1. Scale, stapler, etc. (Y) Why did you say "yes" or "no"?
2. Copier (Y)
3. Typewriter (Y)
4. Tape recorder (N)
5. Ditto machine (Y)







GRADE LEVEL CONCEPT QUESTION, GRADES 1 AND 2

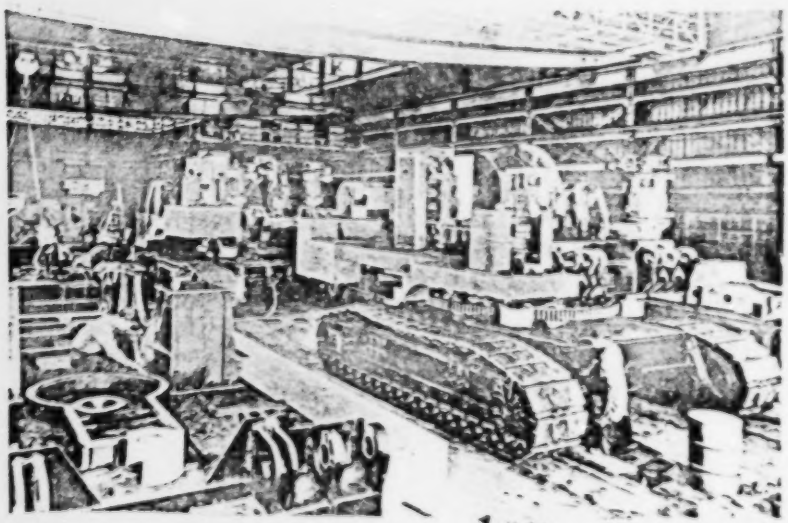
Grade 1, What are the Occupations? (possible 5 points)

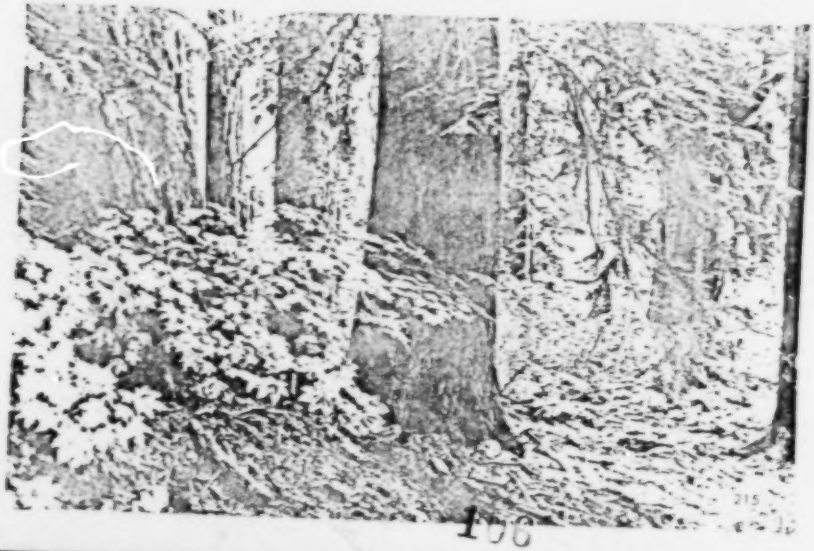
A. Instructions:

Look at each of the pictures and tell me what products are associated with each scene. What products are found in this picture?

B. Scenes

1. Cotton field
2. Tractor assembly
3. Supermarket
4. Factory -- aerial
5. Forest





GRADE LEVEL CONCEPT QUESTION, GRADES 1 AND 2

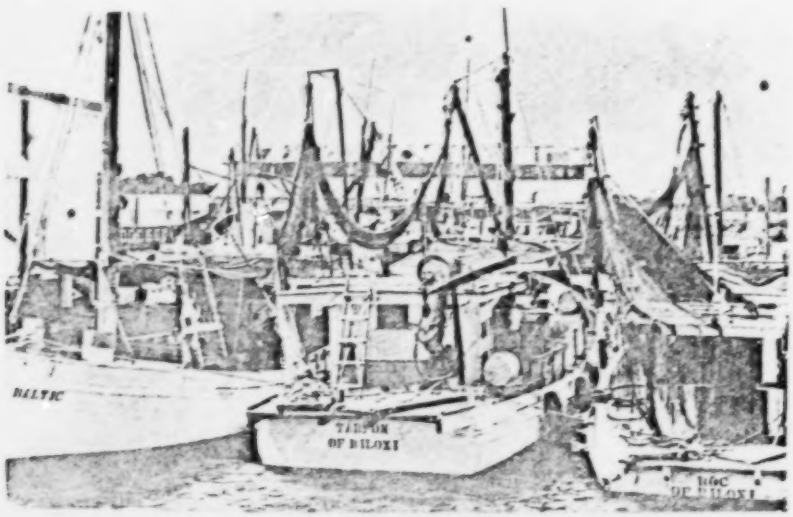
Grade 1, What are the Occupations? (possible 8 points)

A. Instructions:

What jobs can you see in each of these pictures? (Students must identify at least one job correctly.) Ask: Which pictures show people working?

B. Scenes

1. Fishing/pleasure boats
2. Cafeteria worker
3. Laundromat
4. Tractor
5. Steamshovel



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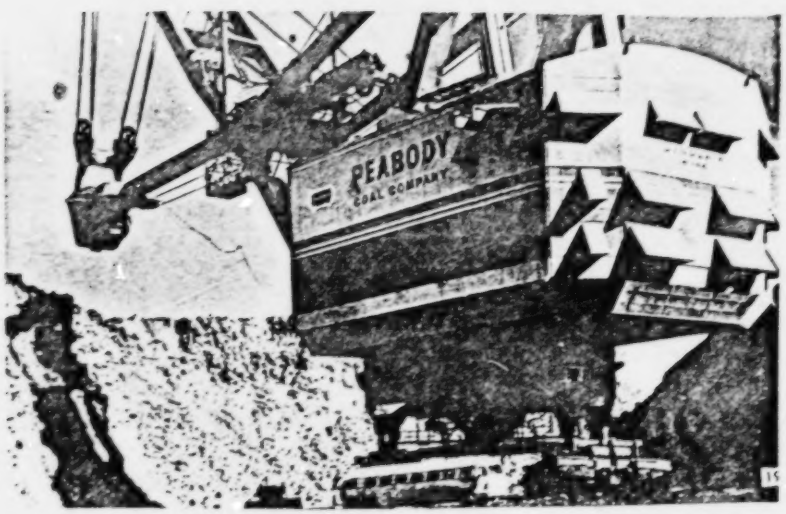

PEABODY
COAL COMPANY

GRADE LEVEL CONCEPT QUESTION, GRADES 1 AND 2

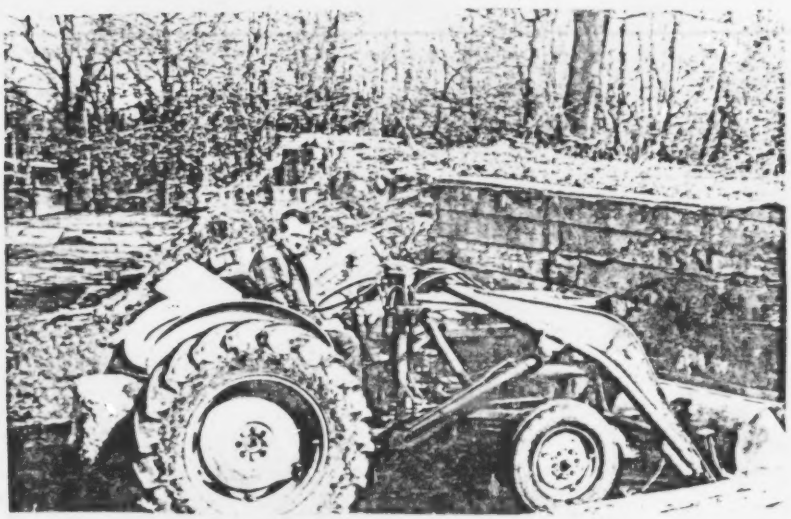
Grade 2, Who Works in these Occupations? (possible 6 points)

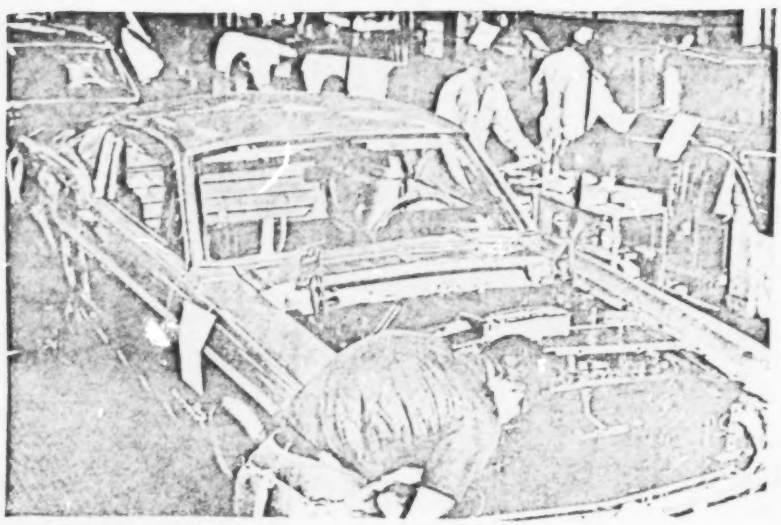
A. Instructions:

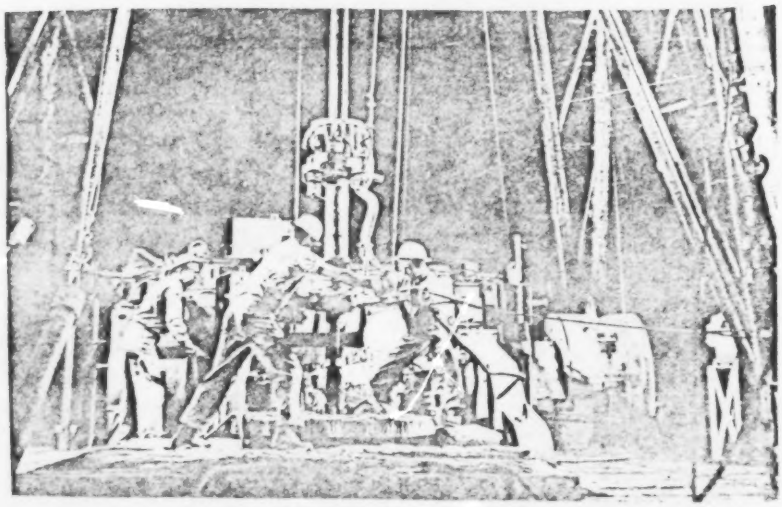
How do the people in the following scenes help us?

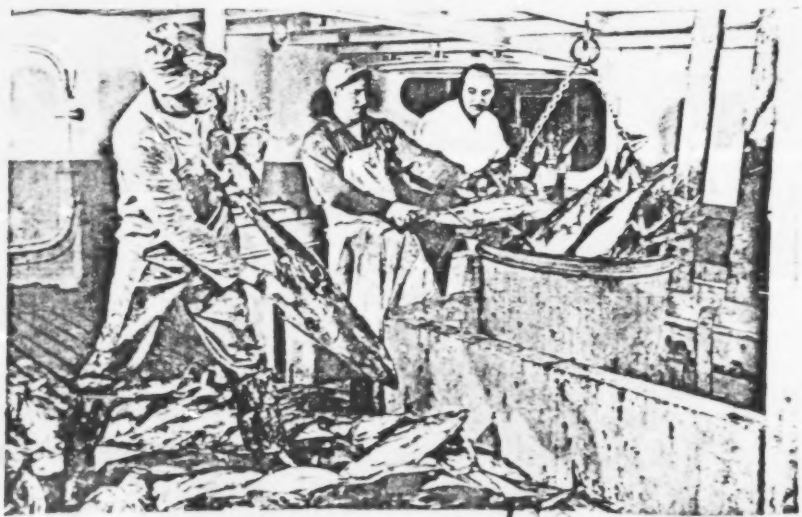
B. Scenes

1. Women preparing food
2. High-lift tractor
3. Car assembly  Why did you say _____? (Bonus)
4. Oil drilling rig
5. Processing fish









GRADE LEVEL CONCEPT QUESTION, GRADES 1 AND 2

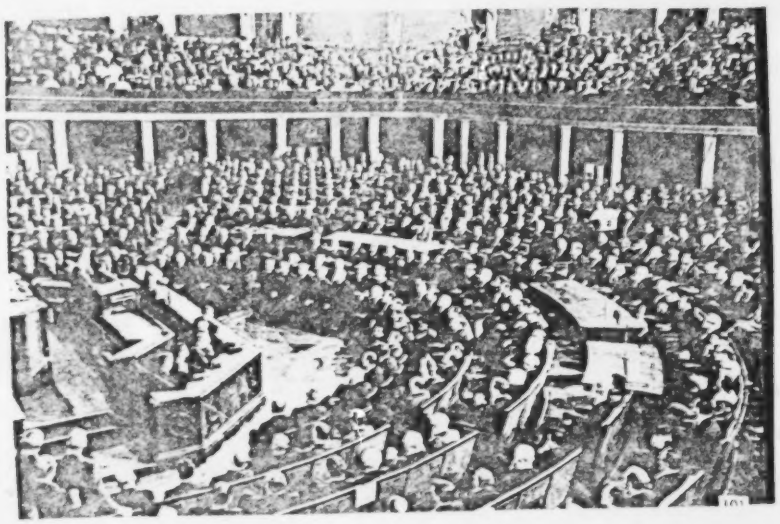
Grade 2, Who Works in these Occupations? (possible 6 points)

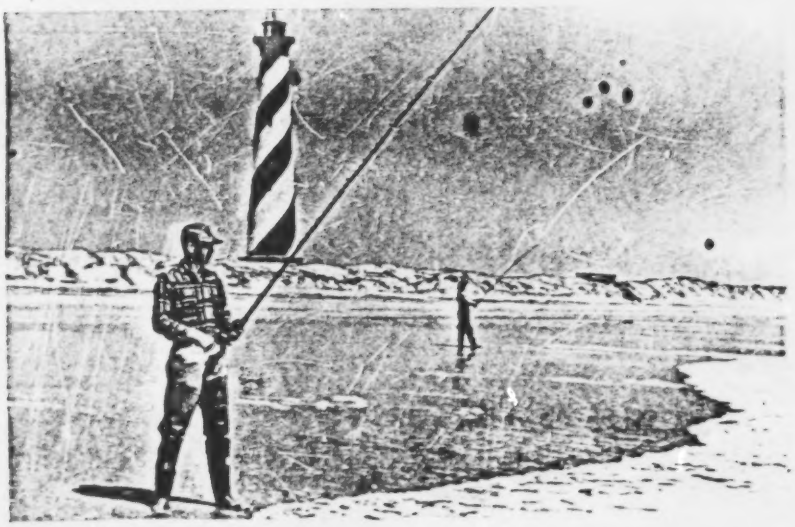
A. Instructions:

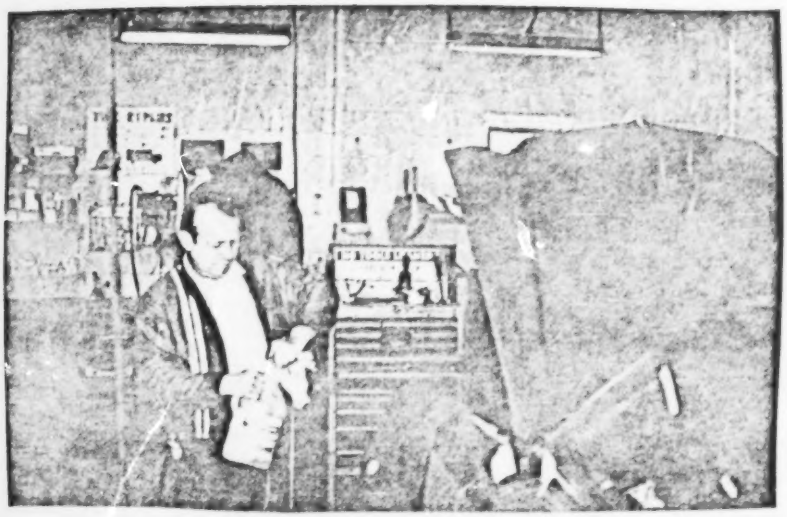
Select pictures that show people working. What type of job do these people do?

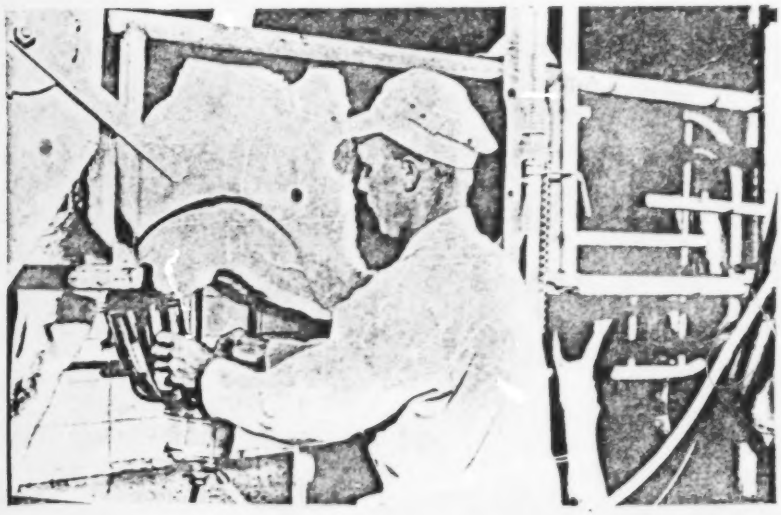
B. Scenes

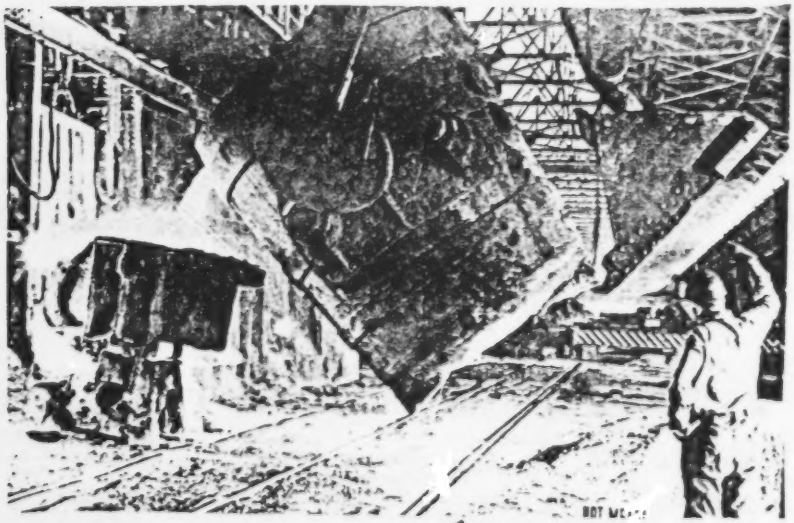
1. Congress Why did you say _____? (Bonus)
2. Fisherman
3. Mechanic
4. Farmer
5. Steel worker











GRADE LEVEL CONCEPT QUESTION, GRADES 3 AND 4

Grade 3, What is the life-style? (possible 6 points)

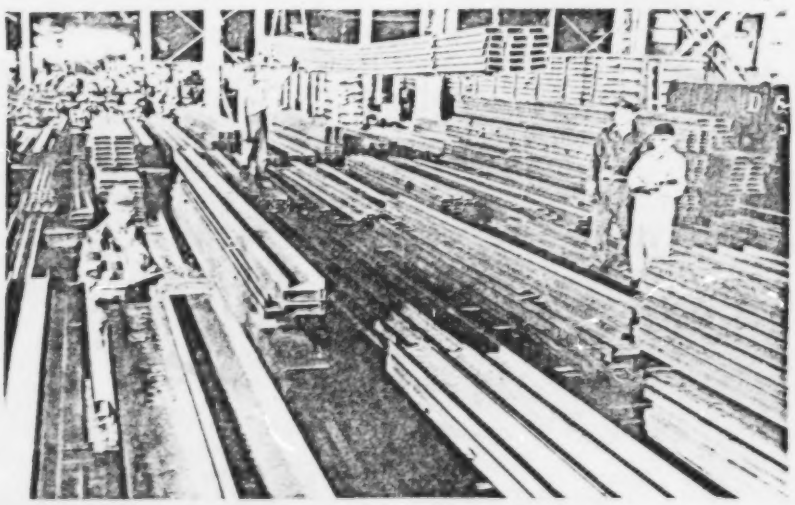
A. Instruction:

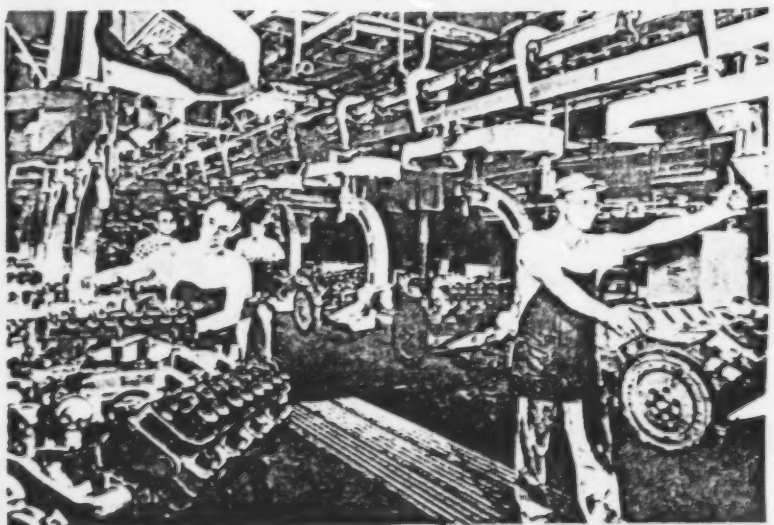
Pick out the scenes that are associated with:

.....the Health Profession
.....Public Service
.....Steelworking

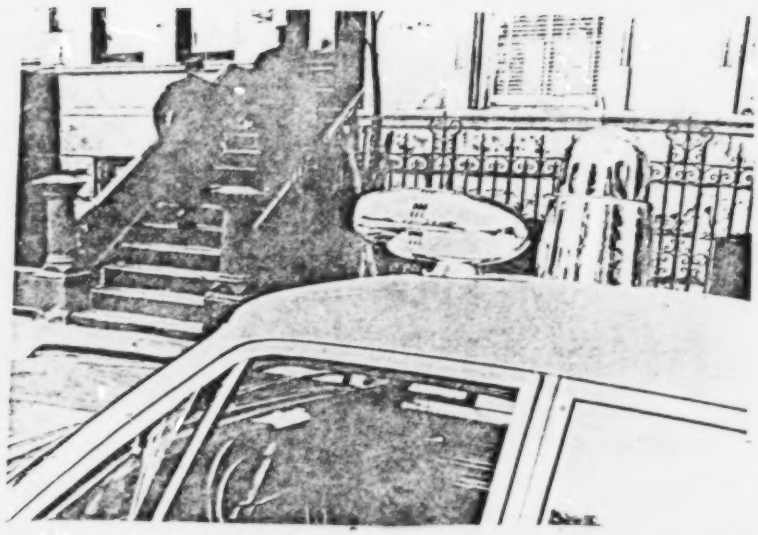
B. Scenes

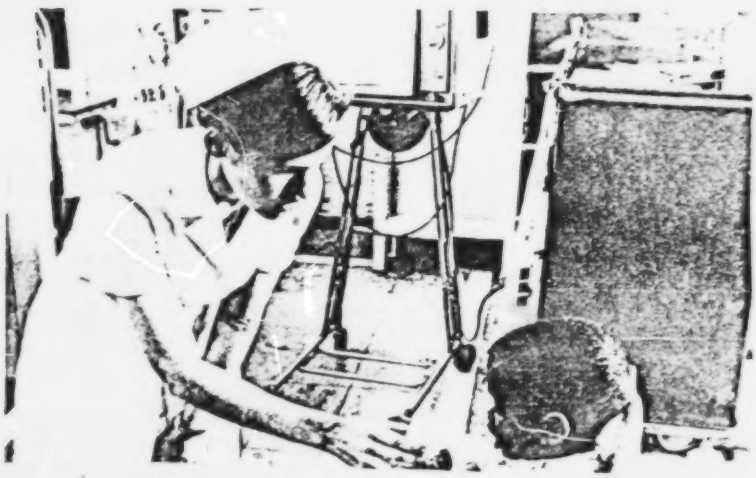
1. Steel mill
2. Engine assembly
3. Garbage collection Why did you say _____ for this one? (Bonus)
4. Policemen
5. Nurse feeding child





sanitation





GRADE LEVEL CONCEPT QUESTION, GRADE 3 AND 4

Grade 3, What is the life-style? (possible 6 points)

A. Instructions:

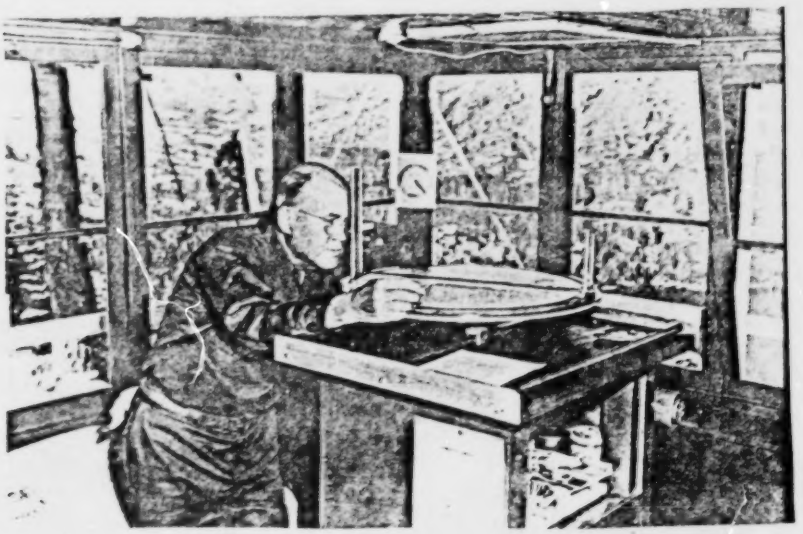
You will be shown eight pictures. Now select the picture that best shows this type of job.

.....salesman, educator, stenographer, forest ranger, actress.

Then ask, "Why did you pick this picture for an actress?" (Bonus)

B. Scenes

1. Forest ranger
2. Stenographer
3. Man sitting (not working)
4. Salesman
5. Educator (man teaching)
6. Girl riding a bicycle
7. Horseback riding
8. Man reading a paper, on a break



GRADE LEVEL CONCEPT QUESTION, GRADES 3 AND 4

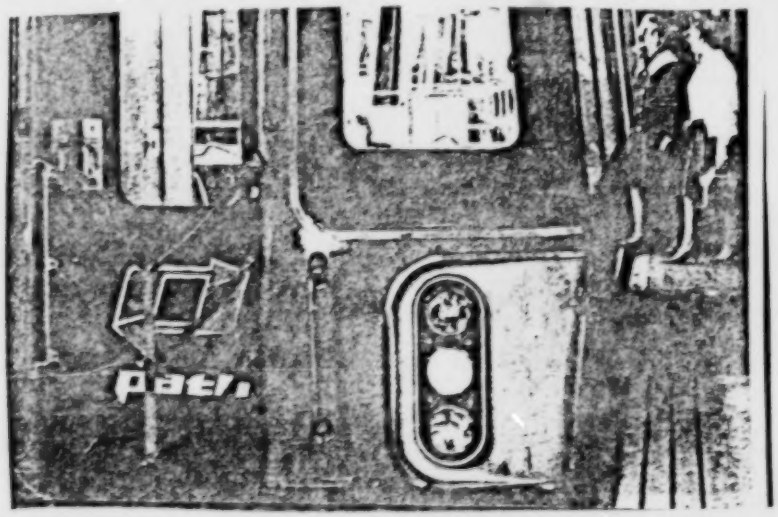
Grade 4, With whom do the people work? (possible 8 points)

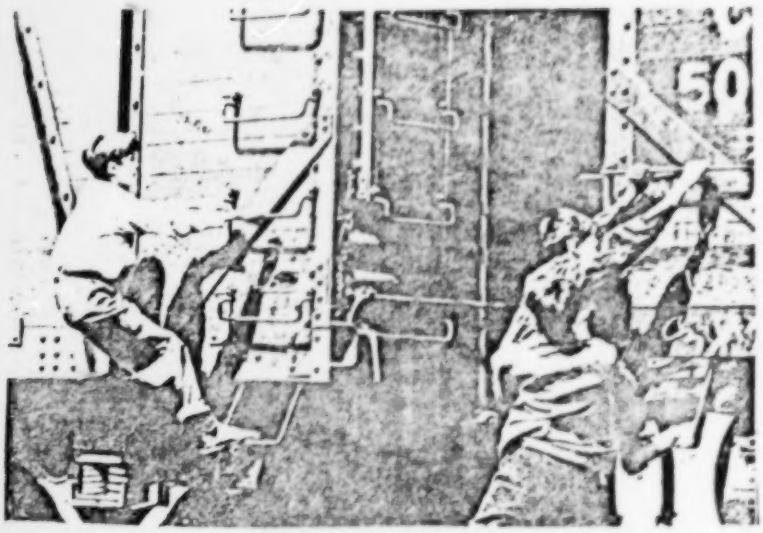
A. Instruction:

You are to look at each picture shown to you. Examine the picture and determine the method of transportation associated with it. Choose from land, sea, and air.

B. Scenes

1. People getting on a subway. (L)
2. Helicopter assembly. (A)
3. Children playing on a boxcar. (L)
4. Loading caterpillar tractors on a ship. (S) How do you know?
5. Kennedy Airport Terminal. (A)
6. Which picture is used for international travel? (Bonus)
7. Which picture is used in intercity travel? (Bonus)
8. Which picture shows transportation used in war? (Bonus)

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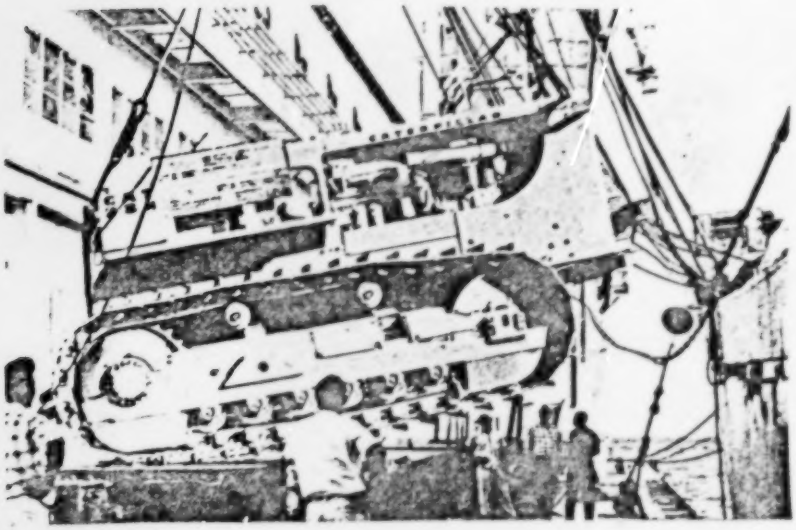


GRADE LEVEL CONCEPT QUESTION, GRADES 3 AND 4

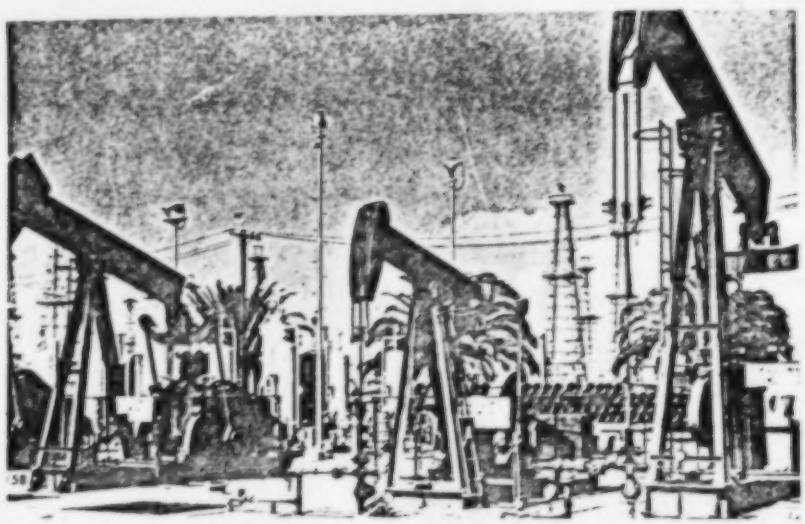
Grade 4, With whom do the people work? (possible 6 points)

A. Instruction:

Which of the following scenes show jobs related to aviation? Then show each picture individually.

B. Scenes

? 1. Oil drilling rig. If yes, why did you say yes? (Bonus)
Y 2. Pilots and stewardess.
N 3. Typing class.
Y 4. Control tower at airport.
Y 5. Stewardess serving food on plane.



Appendix G

Career Awareness Inventory (CAI)

Career awareness in the elementary school is viewed as a period of exploration. During this stage, various aspects of awareness of exploration are emphasized. These include: occupational knowledge, basic skills, interests, positive work attitudes, social involvements, interrelationship of self and education, role identification, decision-making skills, and attitudinal development. These aspects emanate from experiences, education, associations, and understanding of self and human behavior. Career awareness consists of knowledge, attitude, and the self. The Career Awareness Inventory evaluates facets of the above mentioned aspects of career awareness.

Appendix H

Career Maturity Inventory (CMI)

The Career Maturity Inventory is designed to measure the maturity of attitudes and competencies related to realistic career decision making. The CMI consists of two types of measures: the Attitude Scale and the Competence Test. "The Attitude Scale elicits the feelings, the subjective reactions, the dipositions that the individual has toward making a career choice and entering the world of work." (p. 3 CMI Administration and Use Manual). The Competence Test involves the cognitive variables associated with choosing an occupation. These variables include: how well the individual can evaluate his job-related capabilities; how much he knows about the reality of work; how proficient he is in matching personal characteristics with occupational requirements; his ability to plan for a career; and how effectively he can cope with any problems that arise. The Attitude Scale and the Competence Test provide an extensive inventory of the critical behavior necessary for career decision making and development.

Appendix I

Pretest Mean Scores

| | Grade Level | Reading | Mathematics | Career Knowledge |
|---|---|---|---|---|
| Experimental | Kindergarten | 19.33 | 17.73 | |
| Control | | 22.82 | 21.00 | |
| Experimental | First grade | 35.53 | 32.13 | |
| Control | | 36.20 | 38.73 | |
| Experimental | Second grade | 129.00 | 46.87 | |
| Control | | 138.27 | 55.07 | |
| Experimental | Third grade | 147.73 | 88.20 | |
| Control | | 145.40 | 76.36 | |
| Experimental | Fourth grade | 105.47 | 68.47 | |
| Control | | 91.47 | 58.50 | |
| Experimental | Fifth grade | 122.21 | 81.07 | 91.80 |
| Control | | 75.69 | 61.23 | 74.38 |
| Experimental | Seventh grade | 70.47 | 56.47 | 86.33 |
| Control | | 65.67 | 61.67 | 87.33 |
| Experimental | Tenth grade | 72.47 | 45.27 | 116.58 |
| Control | | 59.07 | 35.93 | 98.53 |

STAFF EVALUATION OF CAREER EDUCATION INSERVICE MEETINGS

Project Year 1976

Please circle either a YES or NO response to each of the following questions:

YES NO 1. Did the discussions on career education meet your expectations?

YES NO 2. Did you realize any professional development through these discussions?

YES NO a. A better understanding of the career education concept?

YES NO b. A better understanding of the actual implementation of career education in the classroom?

YES NO c. A better understanding of career development as a life-long continuous process

YES NO 3. Would you like to help with the development of a comprehensive career education plan for your classroom or school system.

YES NO 4. Would you like a follow-up career education workshop to deal with more specific development and implementation?

5. What is your over-all rating of the meetings on career education? (Please circle one)

a. Poor b. Fair c. Average d. Good e. Excellent

6. Please state any reactions you have to career education.

_____

_____

_____

_____

_____

_____

7. Please indicate your appropriate title level and school district that you are involved with.

School District _____

Title and Level _____

Name of Staff Member (Optional) _____

Teacher Responses to Career Education Inservice Questionnaire

Listed below are the comments made by teachers, administrators, and counselors to the inservice questionnaire. Questions 1-5 did not request comments by respondents.

6. Please state any reactions you have to career education.

Teachers

I am teaching a course on career education as an elective, and find it both interesting and informative. To integrate reading, english, and mathematics with career education is a mistake because our students need to understand skills. By adding career education time is taken away from this needed skills.

I haven't utilized career education enough to have a better understanding of its actual implementation in the classroom.

Due to problems this year of us being in and out of school, I really haven't been able to do that much. What little I nave done has gone well and I feel the children enjoyed it.

I did not have the opportunity to do as much as I would have liked with career education because of all the unexpected interruptions.

It is an excellent program toward which more time should be given. A sign-up of teacher participation should probably be at the end of the year for the following year's program. This would allow time at the beginning of the year, prior to school starting, for meetings. Starting the program was the most difficult part for me. Maybe earlier meetings and an understanding of the program and materials available would help make getting started a little easier. My only reason for not working on further evaluation of the Career Education program is that I probably won't be here next year.

Career education should definitely be taught in all schools - in all classes. Students need to be made aware of all the different career possibilities.

The concept of career education is good, but because of our scheduling and interruptions of school days, I feel that I have not had the opportunity or time to spend on activities. Possibly self-contained classrooms are more successful at this than departmental classrooms.

I think career education is very important for today's children. I find they are interested too. However, with the situation in our system this year, we couldn't do justice to the program.

Students in our district are blind to many career openings. Direct contact or movies on different careers could be well received and needed.

The work I did greatly aided in clarifying the whole career concept. Since it was my first exposure to such, I still lack confidence in implementation, can see the need for careers in curriculum and hope to pursue more activity.

It is fairly evident that career education is a necessary strategy in preparing young persons for the world of work.

I feel the way career education integrates the various content areas together into a whole is important. Especially at the elementary level, it seems to make learning more practical to the children.

The IU must bring its ideas to the teachers via the principals. Most counselors are sold on career education. We need help to remove apathy from the staff.

Career education wasn't what I thought it to be. It is easier to implement in your classroom and integrate with the subject matter. When we wrote activities last summer, there were too many unconcerned and lackadaisical writers. This situation must be cleared up. I thank the career education office of the IU for providing this experience for me and I hope to participate in future summer workshops.

Administrators

I feel the initial approach was wrong--that an explanation of "How to" implement career education into the existing curriculum without a major overhaul of teaching practices would have met with better results. (This is the impression I got from Teachers)

At the present time we are involved in the concept of career education on a day to day basis. The teachers implement this concept each day.

The total picture of a program needs to be presented at the beginning. We are getting differing concepts and suggestions. There needs to be a common understanding and presentation by the IU and the "evaluators" for the program.

At this time, my need for inservice in career education is over shadowed by my other information needs. We, as educators, must do a better job o preparing our pupils in the basics. I fear that we will not do this while attempting to do a better job of career awareness. We are making too big a thing of career education.

The goals of career education are very idealistic when considering the tremendous tasks an elementary teacher undertakes. Career education has to be placed in the proper perspective of total elementary education.

You people were going to give us some materials so we could evaluate what we are doing--never heard from you after our meeting on November 22 - Here we are 3 months later?

At this time only a small percentage of staff is committed and has interest in implementation.

IU staff personnel are competent. This district needs a "comprehensive career education plan" this is, in my opinion, the short coming of the existing IU program. The classroom material was good.

Counselors
Very broad and complex.

I don't have time for more.

I want to develop career resource centers in our district's schools in order to prepare for a career education program in our school district.

After this meeting I am aware I am not involved in career education and I feel I should be, but I lack motivation.

Special Ed.
Follow-up meetings in our IU, further development to meet needs of exceptional children.

I would like to try some portions with TMR classes to see if it will work.

# Appendix K

Appendix K contains the teacher and student request forms for the K-12 Career Education Units. Specific forms were utilized at the elementary, junior high and senior high school level.

APPENDIX II

FORM - I

## AWAKE PRE-PLANNING RESOURCE GUIDE

## TEACHER'S REQUEST FORM

Teacher's Name _____ Unit Title _____

School _____ Request Date _____

Phone No. _____ Subject Area _____

Class Use Date _____

## GENERAL CLASS OBJECTIVES

OBJECTIVES

____ ____ ____ ____ ____

____ ____ ____ ____ ____

## PROFESSIONAL DECISION-MAKING VARIABLES

(CIRCLE the variable number applicable to your class or classes)

INSTRUCTIONAL LEVEL AND GOALS

1. K -- Immediate Environment (Home-School-Community). -- What is Work?
2. 1 -- Family. -- What are the occupations?
3. 2 -- Community. -- Who works in these occupations?
4. 3 -- Multi-Community. -- What is the life-style?
5. 4 -- State. -- Whom do people work with?
6. 5 -- National. -- Where are these jobs?
7. 6 -- International. -- How do they accomplish their jobs?

STUDY AREA

(CIRCLE any or all study area variables)

18. Reading

27. Math
28. Science
29. Language Arts
30. Social Studies
31. Fine Arts (Art and Music)

FORM I

IMS # A-IX

ELEMENTARY STUDENT REQUEST FORM

Student's Name_____ Unit Title_____

School_____ Teacher's Name_____

Phone No._____ Subject Area_____

Request Date_____

OBJECTIVES

_____ _____ _____ _____

LEARNER VARIABLES

INSTRUCTIONAL LEVEL AND GOALS -- Circle One

1. K -- Immediate Environment (Home-School-Community). -- What is Work?
2. 1 -- Family -- What are the occupations?
3. 2 -- Community -- Who works in these occupations?
4. 3 -- Multi-Community -- What is the life-style?
5. 4 -- State -- Whom do people work with?
6. 5 -- National -- Where are these jobs?
7. 6 -- International -- How do they accomplish their jobs?

GENERAL INTERESTS -- Circle As Many As Applicable

8. Animals
9. Clubs
10. Entertainment
11. Hobbies
12. Outdoor Life
13. Painting/Drawing/Coloring
14. Play
15. Sports
16. Stories
17. Travel

TO BE COMPLETED BY THE TEACHER ONLY

STUDY AREA -- Circle Any or All Study Area Variables

Reading (Circle One Reading Level)

19. Readiness
20. Primer
21. 1.0
22. 2.0
23. 3.0
24. 4.0
25. 5.0
26. 6.0+

27. Math
28. Science
29. Language Arts
30. Social Studies
31. Fine Arts (Art and Music)

ACHIEVEMENT (Circle One -- Applicable to all study areas EXCEPT Reading)

32. Low Achiever
33. Average Achiever
34. High Achiever

FORM II

ELEMENTARY PRE-PLANNING RESOURCE GUIDE

TEACHER'S REQUEST FORM

TEACHER'S NAME _____ UNIT TITLE _____

SCHOOL _____ REQUEST DATE _____

SCHOOL PHONE NO. _____ SUBJECT AREA _____

CLASS USE DATE _____

GENERAL CLASS OBJECTIVES (Refer to Unit Objective List)

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

PROFESSIONAL DECISION-MAKING VARIABLES

GRADE LEVEL

1. K
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6

SCHOOL DISTRICT (Indicate only if your building is located in one of these districts)

99. Conneaut
100. Corry
101. Crawford Central
102. PENNCREST
103. Titusville

INSTRUCTIONAL GOALS

104. K - What is Work?
105. 1 - What are the occupations?
106. 2 - Who works in the occupations?
107. 3 - What is the life-style?
108. 4 - With Whom do People Work?
109. 5 - Where are these jobs?
110. 6 - How do workers accomplish their jobs?

STUDY AREA

112. Home Economics
114. Language
115. Language Arts
116. Mathematics
117. Music
118. Science
119. Social Studies
120. Reading
121. Interdisciplinary (Self-Contained Classroom)

INSTRUCTIONAL GROUPING

142. Individual Activity
143. Small Group Activity
144. Large Group Activity

INSTRUCTIONAL ACTIVITY

145. Construction
146. Creation
147. Demonstration
148. Design
149. Discussion
150. Dramatization
151. Research/Investigation
152. Field Trip
153. Game
154. Oral Language Development
155. Collection
156. Interview
157. Experiment
158. Listening
159. List
160. Physical/Tactile/Kinesthetic
161. Problem Solving
162. Reading
163. Singing
164. Speech
165. Observation
166. Writing
167. Visit

RESOURCES

168. Art Materials
169. Felt Boards
170. Books
171. Bulletin Board Kits
172. Charts
173. Films
174. Film Strips/Film Loops
175. Puppets
176. Models
177. Instructional Toys
178. Games
179. Magazines/Newspapers
180. Maps
181. Pamphlets
182. Programmed Materials
183. Records
184. Community Resource Places
185. Slides/Photographs
186. Tapes
187. Transparencies
188. Vertical File Materials
189. Resource Persons
190. Video Tapes
191. Paraphernalia
192. Microfilm/Microfiche

EVALUATION DEVICES

193. Standard Test
194. Written Examination
195. Written Report
196. Checklist
197. Rating Scale
198. Selective Observation
199. Log/Diary
200. Oral Examination
201. Oral Report
202. Creation and/or Construction

FORM II

# ELEMENTARY STUDENT REQUEST FORM

STUDENT'S NAME _____ UNIT TITLE _____

SCHOOL _____ TEACHER'S NAME _____

SCHOOL PHONE NO. _____ SUBJECT AREA _____

REQUEST DATE _____

OBJECTIVES (Refer to Unit Objective List)

_____ _____ _____ _____

## LEARNER VARIABLES

### GRADE LEVEL

1. K
2. 1
3. 2
4. 3
5. 4
6. 5
7. 6

### GENERAL INTERESTS

9. Airplanes
10. Bikes
11. Camping
12. Cars/Trucks
13. Clubs
14. Colors
15. Construction (making things
16. Dancing
17. Dramatics
18. Drawing
19. Drugs/Narcotics
20. Earth
21. Ecology
22. Electricity
23. Entertainment
24. Fables/Fairy Tales
25. Family
26. Famous People/Places
27. Farming/Gardening
28. Fashions/Grooming
29. Food/Cooking
30. Friends
31. Games/Puzzles
32. Geography
33. History
34. Hobbies
35. Horses
36. Hunting/Fishing/Trapping
37. Language
38. Magic
39. Mathematics
40. Models
41. Money
42. Music
43. Mysteries/Adventures
44. Needlecraft
45. Neighborhood
46. Painting
47. Pets
48. Photography
49. Play
50. Politics
51. Pre-Historic Animals
52. Racing
53. Reading
54. Religion
55. School
56. Science
57. Scouting/4-H
58. Social Problems
59. Space
60. Sports
61. Stars/Planets
62. Television/Radio
63. Toys
64. Travel
65. Wildlife
66. Writing

TO BE COMPLETED BY TEACHERS ONLY

ACHIEVEMENT (Refers to subjects other than reading)

67. Low Achiever
68. Average Achiever
69. High Achiever

READING LEVEL

70. Reading Readiness
71. Primer
72. 1.0
73. 2.0
74. 3.0
75. 4.0
76. 5.0
77. 6.0+

SCHOOL DISTRICT (Indicate only if your building is located in one of these districts)

99. Conneaut
100. Corry
101. Crawford Central
102. PENNCREST
103. Titusville

INSTRUCTIONAL GOALS

104. K - What is work?
105. 1 - What are the occupations?
106. 2 - Who works in the occupations?
107. 3 - What is the life-style?
108. 4 - With whom do people work?
109. 5 - Where are these jobs?
110. 6 - How do workers accomplish their jobs?

STUDY AREA

112. Home Economics
114. Language
115. Language Arts
116. Mathematics
117. Music
118. Science
119. Social Studies
120. Reading
121. Interdisciplinary (self-contained classroom)

JUNIOR HIGH TEACHER REQUEST FORM

Teacher's Name _____ Unit Title _____

School _____ Request Date _____

Phone No. _____ Subject Area _____

Request Date _____

OBJECTIVES

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

PROFESSIONAL DECISION MAKING VARIABLES

INSTRUCTIONAL GOALS (Grade Level must match Grade Level of the Objective's chosen)

1. 7 -- Exploration of a variety of occupational relationships (People, Data, Things) and occupational levels.

2. 8 -- Exploration of one or two occupational relationships (People, Data, Things) and occupational levels.

3. 9 -- Exploration of one occupational relationships (People, Data, Things) and one occupational level.

STUDY AREA (Circle study area(s) applicable to your class)

4. Math

5. Social Studies

6. Science

7. Language Arts

8. Industrial Arts

TO BE C[illegible]PLETED BY TEACHER ONLY

ACHIEVEMENT LEVEL

15. Below Average

16. Average

17. Above Average

MODES OF LEARNING (Circle the Student's BEST Mode of Learning)

18. Visual (Learning by Means of Sight)

19. Auditory (Learning by Means of Hearing)

20. Tactile/Kinesthetic (Learning by Means of Physical Movement and Touch) .

JUNIOR HIGH STUDENT REQUEST FORM

Student's Name _____ Unit Title _____

School _____ Teacher's Name _____

Phone No. _____ Subject Area _____

Request Date _____

OBJECTIVES

_____ _____ _____ _____

LEARNER VARIABLES

INSTRUCTIONAL GOALS (Grade Level must match Grade Level of the Objectives chosen)

1. 7 -- Exploration of a variety of occupational relationships (People, Data, Things) and occupational levels.
2. 8 -- Exploration of one or two occupational relationships (People, Data, Things) and occupational levels.
3. 9 -- Exploration of one occupational relationships (People, Data, Things) and one occupational level.

STUDY AREA

4. Math
5. Social Studies
6. Science
7. Language Arts
8. Industrial Arts

OCCUPATIONAL LEVELS (Only Applicable to Grades 8 and 9)

11. Management (College Prep Training)
12. Skilled (Post-Secondary Training)
13. Semi-Skilled (Vocational-Technical Training)
14. Non-Skilled (Immediate Employment)

FORM II

JUNIOR HIGH PRE-PLANNING RESOURCE GUIDE

TEACHER'S REQUEST FORM

TEACHER'S NAME _____ UNIT TITLE _____

SCHOOL _____ REQUEST DATE _____

SCHOOL PHONE NO. _____ SUBJECT AREA _____

GENERAL CLASS OBJECTIVES (Refer to Unit Objective List)

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

PROFESSIONAL DECISION MAKING VARIABLES

GRADE LEVEL

1. 7
2. 8
3. 9

STUDY AREA

86. Agriculture
87. Art
88. Commercial
89. Consumer/Homemaking
90. Industrial Arts
91. Language
92. Language Arts
93. Mathematics
94. Music
95. Science
96. Social Studies
97. Vocational/Technical
98. Interdisciplinary - Sp. Education
99. Physical Ed./Adaptive Phys. Ed.
100. Health

SCHOOL DISTRICT (Indicate only if your building is located in one of these districts)

101. Conneaut
102. Corry
103. Crawford Central
104. PENNCREST
105. Titusville

INSTRUCTIONAL GROUPING

123. Individual Activities
124. Small Group Activity
125. Large Group Activity

INSTRUCTIONAL ACTIVITY

126. Constructing
127. Creating
128. Demonstrations
129. Design
130. Discussions
131. Dramatization
132. Drill Practice
133. Field Trips
134. Game Playing
135. Interviewing
136. Laboratory
137. Listening
138. Listing
139. Physical/Tactile
140. Problem Solving
141. Reading
142. Speaking
143. Viewing
144. Writing

RESOURCES

145. Art Materials
146. Micro-film/Micro-finche
147. Looks
148. Bulletin Board Kits
149. Charts
150. Films
151. Film Strips/Film Loops
152. Games
153. Magazines
154. Maps
155. Pamphlets
156. Programmed Material
157. Records
158. Resource People
159. Resource Places
160. Slides
161. Tapes
162. Transparencies
163. Vertical File Materials
164. Video-Tapes
165. Paraphernalia

EVALUATION DEVICES

166. Standardized Test
167. Teacher-made Test
168. Essay
169. Self-Evaluation
170. Peer Evaluation
171. Teacher Evaluation
172. Checklist
173. Rating Scale
174. Selective Observation
175. Log/Diary
176. Oral Examination
177. Oral Report
178. Creation and/or Construction

FORM II

JUNIOR HIGH STUDENT REQUEST FORM

STUDENT'S NAME _____ UNIT TITLE _____

SCHOOL _____ TEACHER'S _____

SCHOOL PHONE NO. _____ SUBJECT AREA _____

OBJECTIVES (Refer to Unit Objective List)

_____ _____ _____ _____

LEARNER VARIABLES
(Only CIRCLE those items which you think are important)

GRADE LEVEL

1. 7
2. 8
3. 9

GENERAL INTEREST AREAS OF STUDENT
(Multiple Selection)

4. Aeronautics
5. Airplanes
6. Anthropology
7. Art
8. Astronomy
9. Communications
10. Community
11. Crime
12. Drugs/Narcotics
13. Earth
14. Ecology
15. Economics
16. Famous People
17. Folklore/Myth
18. Food/Cooking
19. Games
20. Geography
21. Heavy Equipment
22. History
23. Hobbies
24. Language
25. Mathematics
26. Medicine/Health
27. Models
28. Money
29. Movies
30. Music
31. Occult
32. Pets
33. Philosophy
34. Photography
35. Politics
36. Psychology
37. Radio/TV
38. Reading
39. Recreation
40. Religion
41. Science
42. Sewing
43. Social Problems
44. Social Studies
45. Space
46. Sports
47. Travel
48. Vehicles
49. Writing, fiction, non-fiction

CAREER EXPLORATION

I would like to explore Careers which would entitle me to ...

50. Secure immediate employment
51. Enter an apprenticeship program
52. Pursue skill in training in a technical school
53. Pursue advanced formal education

TO BE COMPLETED BY TEACHERS

ACHIEVEMENT

54. Low Achiever
55. Average Achiever
56. High Achiever

READING LEVEL

57. 0-5
58. 6-8
59. 9+

STUDY AREA

86. Agriculture
87. Art
88. Commercial
89. Consumer/Homemaking
90. Industrial Arts
91. Language
92. Language Arts
93. Language Arts
94. Music
95. Science
96. Social Studies
97. Vocational/Technical
98. Interdisciplinary -- Special Education
99. Physical Ed./Adaptive Physical Education
100. Health

SCHOOL DISTRICT
(Indicate only if your building is located in one of these districts)

101. Conneaut
102. Corry
103. Crawford Central
104. PENNCREST
105. Titusville

APPENDIX V

GOVERNMENT CAREERS

TEACHER REQUEST FORM

Teacher's Name _____ Unit Title _____

School _____ Request Date _____

Phone No. _____ Subject Area _____

OBJECTIVES

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

STUDY AREA

16. Social Studies
17. Math
18. Language Arts

TYPES OF (Large Group) ACTIVITIES

19. Classroom Visitor
20. Demonstration
21. Field Trip
22. Lecture

APPENDIX VI

GOVERNMENT CAREERS

STUDENT REQUEST FORM

Student's Name _____ Unit Title _____

School _____ Teacher's Name _____

OBJECTIVES

_____ _____ _____ _____

MODES OF LEARNING (Which ways do you learn best?)

| VISUAL (Learning by means of sight) | AUDITORY (Learning by means of Hearing) | TACTILE/KINESTHETIC (Learning by means of physical movement and touch) |
|---|---|---|
| 1. Observation | 4. Listening | 7. Physical/Tactile |
| 2. Reading | 5. Speaking | 8. Dramatization |
| 3. Viewing | 6. Interview | 9. Constructing |
| | | 10. Action/Exploratory |
| | | 11. Problem Solving |
| | | 12. Writing |

TO BE COMPLETED BY TEACHER ONLY

ACHIEVEMENT LEVEL (Circle One)

13. Below Average
14. Average
15. Above Average

STUDY AREA

16. Social Studies
17. Math
18. Language Arts

Senior High

TEACHER'S REQUEST FORM

Teacher's Name_____ Subject Area_____

School_____ Unit Title_____

Phone No._____ Request Date_____

GENERAL CLASS OBJECTIVES

OBJECTIVES

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

PROFESSIONAL DECISION-MAKING VARIABLES

INSTRUCTIONAL LEVELS -- (Circle the applicable level or levels of the student enrollment in your class)

40. Ten -- Fundamental
41. Eleven -- Application
42. Twelve -- Refinement

INSTRUCTIONAL ACTIVITY -- (Multiple Selection)

43. Teacher Demonstrations
44. Problem Solving
45. Field Trips
46. Listening
47. Constructing
48. Classroom Visitor
49. Lecture
50. Student Led Discussion
51. Viewing
52. Creating
53. Interview
54. Dramatization
55. Reading
56. Writing
57. Speaking
58. Laboratory
59. Physical/Tactile
60. Teacher Led Discussion
61. Action/Exploratory
62. Listing
63. Games

Senior High

## Student's Request Form

Student's Name _____ Subject Area _____

School _____ Unit Title _____

Phone No. _____ Teacher's Name _____

Request Date _____

OBJECTIVES

____ _____ _____ _____

LEARNER VARIABLES

(There should be a logical correlation between the Career Goal, the Career Cluster and the Study Area selected by the student)

CAREER GOAL -- (Circle One)

At the completion of high school, I plan to . . . . . .

1. Secure immediate employment
2. Enter an apprenticeship program or Pursue skill in training in a technical school
3. Pursue advanced formal education

CAREER CLUSTERS -- (Circle One)

4. Industry
   - Ag-Bus. Natural Resources
   - Construction
   - Manufacturing
   - Marine Science

5. Commerce
   - Business and Office
   - Communications
   - Marketing and Distribution
   - Transportation

6. Services
   - Consumer-Homemaking
   - Environmental
   - Fine Arts and Humanities
   - Health
   - Hospitality and Recreation
   - Personal Service
   - Public Service

Therefore, I Am In This Study Area . . . . . (Circle One)

7. College Prep
8. General
9. Commercial
10. Consumer/Homemaking
11. Agriculture
12. Agriculture -- Business
13. Automotive Mechanics
14. Carpentry
15. Commercial Art
16. Cosmetology
17. Data Processing
18. Distributive Education
19. Drafting and Design
20. Industrial Electronics
21. Electronics Technology
22. Food preparation
23. Machine Shop
24. Tool and Die Technology
25. Welding
26. Air Conditioning
27. Appliance Repair
28. Automotive Body
29. Masonry
30. Plumbing/Pipe Fitting
31. Building Maintenance Trades
32. Graphics
33. Sheet Metal
34. Mill/Cabinet Maker
35. Health Services
36. Hotel/Motel Management

READING ACHIEVEMENT -- (Circle One)

37. Below Average
38. Average
39. Above Average

INSTRUCTIONAL LEVELS -- (Circle One)

40. Ten -- Fundamental
41. Eleven -- Application
42. Twelve -- Refinement

SENIOR HIGH PRE-PLANNING RESOURCE GUIDE

TEACHER'S REQUEST FORM

Teacher's Name _____ Subject Area _____

School _____ Unit Title _____

School Phone No. _____ Request Date _____

GENERAL CLASS OBJECTIVES (Refer to Unit Objective List)

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

PROFESSIONAL DECISION-MAKING VARIABLES

GRADE LEVELS

26. 10
27. 11
28. 12

SCHOOL DISTRICTS (indicate only if your building is located in one of these districts)

104. Conneaut
105. Corry
106. Crawford Central
107. PENNCREST
108. Titusville

INSTRUCTIONAL GROUPING

127. Individual Student Activities
128. Small Group Activity
129. Large Group Activity

INSTRUCTIONAL ACTIVITY

130. Teacher Demonstrations
131. Problem Solving
132. Field Trips
133. Listening and Viewing
134. Constructing/Creating
135. Drill Practice
136. Lecture
137. Student Led Discussion
138. Dramatization
139. Reading
140. Writing
141. Speaking
142. Laboratory
143. Physical/Tactile
144. Teacher Led Discussion
145. Action/Exploratory

RESOURCES

146. Books
147. Films
148. Resource People
149. Charts
150. Magazines
151. Opaque Projector Material
152. Tapes
153. Slides
154. Vertical File Materials/Pamph
155. Film Strips/Loops
156. Resource Places
157. Maps
158. Bulletin Board Design Materials
159. Overhead Projector
160. Programmed Materials
161. Records
162. Art Materials

EVALUATION DEVICES

163. Standardized Test
164. Teacher-Made Test
165. Checklist
166. Self-Evaluation
167. Selective Observation
168. Peer Evaluation
169. Essay
170. Rating Scale
171. Log/Diary
172. Creation and/or Construction
173. Oral Examination
174. Oral Report

FORM II

SENIOR HIGH STUDENT REQUEST FORM

STUDENT'S NAME _____ SUBJECT AREA _____

SCHOOL _____ UNIT TITLE _____

SCHOOL PHONE NO. _____ TEACHER'S NAME _____

REQUEST DATE _____

OBJECTIVES (Refer to Unit Objective List)

_____ _____ _____ _____

LEARNER VARIABLES
(Only CIRCLE those items which you think are important)

CAREER GOAL

At the completion of high school, I plan to ...

1. Secure immediate employment
2. Enter an apprenticeship program
3. Pursue skill in training in a technical school
4. Pursue advanced formal education

CAREER CLUSTERS

5. Agri-Business and Natural Resources
6. Business and Office
7. Communications and Media
8. Construction
9. Consumer and Homemaking
10. Environmental
11. Fine Arts and Humanities
12. Health
13. Hospitality and Recreation
14. Manufacturing
15. Marine Science
16. Marketing
17. Personal Service
18. Public Service
19. Transportation

Therefore, I Am In This Study Area ...

20. College Prep
21. General
22. Commercial
23. Consumer/Homemaking
24. Agriculture
25. Vocational-Technical Program

GRADE LEVELS

26. 10
27. 11
28. 12

GENERAL INTERESTS

29. Psychology
30. Philosophy/Logic
31. Religion
32. Astrology
33. Pets
34. Automobiles
35. Music
36. Hobbies
37. Art
38. Sports
39. Mathematics
40. Modern Language
41. Social Studies
42. Language Arts
43. Science
44. Travel
45. Politics
46. Writing, fiction, non-fiction
47. Reading

SPECIFIC VOCATIONAL-TECHNICAL INTERESTS

48. Agriculture -- Business
49. Automotive Mechanics
50. Carpentry
51. Commercial Art
52. Cosmetology
53. Data Processing
54. Distributive Education
55. Drafting and Design
56. Industrial Electronics
57. Electronics Technology
58. Food Preparation
59. Machine Shop
60. Tool and Die Technology
61. Welding
62. Air Conditioning
63. Appliance Repair
64. Automotive Body
65. Masonry
66. Plumbing/Pipe Fitting
67. Building Maintenance Trades
68. Graphics
69. Sheet Metal
70. Mill/Cabinet Maker
71. Health Services
72. Hotel/Motel Management

TO BE COMPLETED BY TEACHERS ONLY

READING ACHIEVEMENT

84. Below Average
85. Average
86. Above Average

MENTAL MEASUREMENT

87. Below Average
88. Average
89. Above Average

SCHOOL DISTRICT (indicate only if your building's located in one of these districts)

104. Conneaut
105. Corry
106. Crawford Central
107. PENNCREST
108. Titusville

OMB APPROVAL NO. 29-R0224

# FINANCIAL STATUS REPORT

1. FEDERAL AGENCY AND ORGANIZATIONAL ELEMENT: U.S. OFFICE OF EDUCATION (OCE)

2. FEDERAL GRANT NO. OR OTHER IDENTIFYING NO.: 300760300

3. NAME AND ADDRESS OF GRANTEE ORGANIZATION:
Northwest Tri County Intermediate Unit
252 Waterford Rd.
Edinboro, Penna. 16412

4. EMPLOYER IDENTIFICATION NO.: 1251211504A1

5. GRANTEE ACCOUNT NO. OR IDENTIFYING NO.: 26

6. FINAL REPORT: [X] YES [ ] NO

7. BASIS OF REPORT: [X] CASH [ ] ACCRUED EXPENDITURES

8. PROJECT PERIOD (Month, Day, Year): FROM 7 1 76 TO 6 30 77

9. REPORT PERIOD (Month, Day, Year): FROM 7 1 76 TO 6 30 77

| 10. STATUS OF FUNDS | PROGRAMS - FUNCTIONS - ACTIVITIES (1) Career Education Program (93.380) | (2) | (3) | (4) | (5) | (6) | TOTAL |
|---|---|---|---|---|---|---|---|
| a. Total outlays previously reported | 54,343 | | | | | | 54,343 |
| b. Total program outlays this period | 45,657 | | | | | | 45,657 |
| c. LESS: Program income credits | -0- | | | | | | -0- |
| d. Net program outlays this period | 45,657 | | | | | | 45,657 |
| e. Total program outlays to date | 100,000 | | | | | | 100,000 |
| f. LESS: Non-Federal share of program outlays | -0- | | | | | | -0- |
| g. Total Federal share of program outlays | 100,000 | | | | | | 100,000 |
| h. Total unpaid obligations | -0- | | | | | | -0- |
| i. LESS: Non-Federal share of unpaid obligations | -0- | | | | | | -0- |
| j. Federal share of unpaid obligations | -0- | | | | | | -0- |
| k. Total Federal share of outlays and unpaid obligations | 100,000 | | | | | | 100,000 |
| l. Total Federal funds authorized | 100,000 | | | | | | 100,000 |
| m. Unobligated balance of Federal funds | -0- | | | | | | -0- |

APPROVED FOR CLOSEOUT
SUBJECT TO:
[ ] indirect cost finalization and audit, or
[X] audit only
Grants Officer — Date 12/16/77

11. INDIRECT EXPENSE: a. TYPE OF RATE (Mark box)
[ ] PROVISIONAL [ ] FINAL
[X] PREDETERMINED [ ] FIXED

b. RATE: .0352
c. BASE: $96,600.00
d. TOTAL AMOUNT: 3,400.00
e. FEDERAL SHARE: 3,400.00

12. REMARKS (Attach additional sheets if necessary)

13. Certification - I certify that to the best of my knowledge and belief this report is correct and complete and that all outlays and unpaid obligations are for the purpose set forth in the grant award documents.

NAME AND TITLE: Kenneth D. Frantz, Executive Director
TELEPHONE: AREA CODE 814 NUMBER 734-5610 EXT. 225
SIGNATURE OF AUTHORIZED OFFICIAL: Kenneth D. Frantz
DATE REPORT IS SUBMITTED: 9-27-77

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NEW ADD